The London School of Economics and Political Science

Department of International Relations

OPENING SKIES: THE POLITICAL ECONOMY OF THE AIR CARGO INDUSTRY IN THE PHILIPPINES AND TAIWAN

by

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This thesis is dedicated to Dr. Michael Hodges (1945 – 1998).

He was an example to us all.

CONTENTS

LIST OF FIGURES

LIST OF ABBREVIATIONS

AmCham	American Chamber of Commerce
APEC	The Asia-Pacific Economic Cooperation
APROC	Asia Pacific Regional Operations Center (Taiwan)
ASA	Air Service Agreement
ASEAN	Association of Southeast Asian Nations
BOT	Build-Operate-Transfer
CAB	Civil Aeronautics Board (Philippines)
CAL	China Airlines (Taiwan)
CEPD	Council for Economic Planning and Development (Taiwan)
CKS	Chiang Kai Shek International Airport (Taipei)
Delbros	Delagado Brothers
DHL	DHL International
DOTC	Department of Transportation and Communication (Philippines)
EVA	EVA Air (Taiwan)
EO	Executive Order
EU	European Union
FDI	Foreign Direct Investment
FTK	Freight-Ton-Kilometer
GATS	General Agreement on Trade in Services
GATT	General Agreement and Tariffs and Trade
GDP	Gross Domestic Product
IATA	International Association of Transportation Airlines
ICAO	International Civil Aviation Organization
IGO	Intergovernmental Organization
IPE	International Political Economy
IR	International Relations
KMT	Kuomintang
MCIA	Mactan-Cebu International Airport (Philippines)
MOTC	Ministry of Transportation and Communications (Taiwan)
NAIA	Ninoy Aquino International Airport (Manila)
NEDA	National Economic and Development Authority (Philippines)
NT	New Taiwan (dollar)
PAL	Philippine Airlines
PEAC	Pacific East Asia Cargo (Philippines)
PRC	People's Republic of China
ROC	Republic of China (Taiwan)
R.P.	Republic of the Philippines
RTK	Revenue Ton Kilometers
SEZ	Special Economic Zone
SCCP	Subcommittee on Customs Procedures (APEC)
TAA	Taipei Airline Association
TECO	Taipei Economic and Cultural Office
TNC	Transnational Corporation

TNT	TNT Post / TNT Express
UN	United Nations
UNCTAD	United Nations Center for Trade and Development
UPS	United Parcel Service
WCO	World Customs Organization
WTO	World Trade Organization

ABSTRACT

This thesis examines the political economy of the air cargo industry in the Philippines and Taiwan in the 1990s. The air cargo industry is an important facilitator of economic globalization and now transports 34% of world merchandise trade by value. The Philippines and Taiwan were selected because of their central location in East Asia, a region highly dependent on air cargo-facilitated trade.

The growing economic role of air cargo service clashes with the propensity of national governments to protect domestic air cargo interests from air cargo transnational corporations (TNCs). The primary question addressed in this research is to determine what factors influenced air cargo policy decisions by the Philippines and Taiwan during the 1990 – 1999 timeframe. A levels-of-analysis empirical approach is utilized that includes causal factors emanating from domestic and international sources, including interests, institutions, and ideas. The potential contribution of crises to policy outcomes is also considered.

The themes that emerge from this research are the interplay between interests and domestic political institutions on policy outcomes; the role of TNCs as political actors; the influence of state-state bargaining on commercial policy outcomes; and the constraints imposed by international institutions on national decision-makers.

The empirical argument presented is that economic globalization and the rise of TNCs are challenging the ability of national governments to pursue independent commercial policies for some, but not all, air cargo issue-areas. It is also argued that the structure of domestic political institutions plays an important role in policy outcomes by attenuating the influence of air cargo interests.

Acknowledgements

The journey to complete this research has been most unusual. The very idea to pursue a PhD was sparked by conversations with Dr. Michael Hodges of The London School of Economics in the mid-1990s. Despite my status at the time as an aerospace industry executive, he encouraged me to pursue my dream of completing a PhD in International Relations and offered to supervise my research. Shortly after beginning, however, Dr. Hodges tragically and unexpectedly passed away. I must therefore begin by acknowledging Michael Hodges for providing the inspiration to undertake this endeavor in the first place. Thank you, Michael.

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I accept complete responsibility for errors of omission, content, and style. Like all human beings, I have biases that undoubtedly influence the way that I interpreted information. I have done my utmost to be comprehensive and objective.

I would like to close with one of my favorite quotes that seems fitting on this occasion:

> *"Happy are those who dream dreams and are ready to pay the price to make them come true."*
>
> L.J. Cardinal Sunnens

Chapter I: The Air Cargo Industry In International Political Economy

Introduction And Overview

This thesis is concerned with the creation of commercial policy by states in the international system. Traditional international relations theory (realism) has focused on the state as the primary actor in the international system and commercial policy (including trade, foreign direct investment, and industry policies) within the domain of state control. International organizations and regimes, transnational corporations (TNCs), and domestic interests all may play a role in commercial policy creation, but they are clearly subordinate to the desires of state government elites who formulate commercial policy as a means of enhancing national wealth and military security.[1] In contrast, some international political economy (IPE) scholars have argued that the state-centric view of commercial policy creation is outdated because of the rising influence of markets and powerful TNCs in an increasingly global economy. As a result, TNCs have joined the ranks of states as primary actors in the international system and have a growing role in shaping policy outcomes.[2] Yet another perspective of the international system sees the gradual emergence of an international society centering on cooperation among states with shared values as playing a key role in policy outcomes.[3]

A common thread of many theoretical challenges to realism is the notion that economic globalization and increased interdependence are eroding national sovereignty. This thesis aims to understand to what extent national governments are losing independent control over commercial policy by analyzing one of the most heavily state regulated elements of the global economy: the commercial air cargo industry.[4] The working hypothesis is this research is that economic globalization and the rise of TNCs are indeed challenging the ability of national governments to pursue independent commercial policy.

The air cargo industry has been dominated by state regulation since the 1944 Chicago Convention on International Civil Aviation, which specified that international air transportation be regulated by bilateral agreements between governments. These agreements specify designated suppliers, available routes, frequency of service, and even fares for trade in air cargo services between states.[5] Clashing with the propensity of the state to closely regulate air transportation is the economic imperative to enhance the density and quality of air cargo service as a result of the increasing globalization of production. Until very recently,

> The production process itself was primarily organized within national economies or parts of them. International trade...developed primarily as an exchange of raw materials and foodstuffs...[with]...products manufactured and finished in single national economies...In terms of production, plant, firm and industry were essentially national phenomena.[6]

What has emerged is a global production structure for many industries – especially high-value added goods like computers, communications equipment, and electronics. Fewer and fewer products can be produced competitively today solely on the basis of national inputs. By one estimate, global production sharing accounts for 7.5% of world GDP ($800 Billion) or some 30% of world trade in manufactured products. Moreover, trade in intermediate goods is growing significantly faster than trade in finished products.[7] Thus while some economists rightly argue that international *level* trade is approximately the same share of the world economy as 100 years ago, it is clear that the *type* of trade has changed substantially.[8]

A key enabler for these production structures is an integrated air cargo network that allows seamless, inexpensive, and timely transport of parts, subassemblies, and finished products. While there are many suppliers of basic airport-to-airport air freight service – including passenger airlines, which carry freight to supplement their core passenger business—there are relatively few suppliers of an end-to-end, express air cargo service, which allows logistics management and just-in-time delivery anywhere in their network. Four integrated service providers own the most extensive and sophisticated networks: United Parcel Service, FedEx, TNT, and DHL. These four TNCs have a truly global presence with all operating in more than 200 countries. One survey recently named Brussels-based DHL the "most global firm" in the world.[9] One would therefore expect these four firms, and the industry interests they support, to be advocates of commercial policy liberalization. Air cargo TNCs and their clients are not the only interests with a stake in policy outcomes; passenger carriers, labor interests, industry associations, and other states (through bilateral negotiation) also seek to influence policy outcomes.[10]

Although there are many interests engaged in policy determination, they are not the only factor influencing policy outcomes. As David Henderson (1998) has noted, ideas can play a robust role in framing commercial policy at the macro and micro levels.[11] Beyond ideas, the role of institutions -- formal and informal constraints imposed on decision makers — also modulate policy outcomes.[12]

To understand the influence of each of these factors, this research will examine commercial policy outcomes (including trade, foreign direct investment, and industry policies) over the 1990 – 1999 timeframe in the Philippines and Taiwan. Both states, centrally located in East Asia, sought to become regional air cargo hubs and successfully bargained with air cargo TNCs to establish hubs in their territories. Yet both states have different per capita incomes, cultures, and institutions. The focus on Asia-Pacific is notable as it is composed of states highly dependent high value exports that are separated from each other and global markets by vast distances of water. With ground-based transportation not a strong option for most states and maritime transportation is exceedingly slow in an era of just-in-time production, air cargo shipments within the Asia-Pacific region grew at a 12.3% annual rate from 1977 to 1997.[13]

THE EMPIRICAL FOCUS

Why Examine Policy Changes At The Sectoral, Or "Micro-level?"

The last 20 years have produced a significant body of international political economy literature at the state economy, or macro-level. This body of work dealt with key issues such as trade liberalization versus import substitution, monetary policy, fiscal policy, and the role of institutions in policy reform. A key issue driving this research was why some countries succeeded and others failed in pursuing a broad agenda for economic reform.[14]

While macro-level policies shape the aggregate demand and supply for an economy, it is at the sectoral or "micro-level" where much of the general economic policy is converted into specific laws and trade agreements. As Robert Wade (1990) has noted, macroeconomic policies affect different industries differently although not intended to produce such differential effects, but sectoral industrial policies are intended to affect production and investment decisions of decentralized producers.[15] Hence, it is at this level where a variety of interests – including transnational corporations, trade unions, and powerful individuals -- engage the political system to influence outcomes. Commercial policy outcomes at the micro-level often have direct bearing on the economic activity of regional and local economies, thus engaging domestic political interests in the policy making process. Finally, many international trade agreements and regimes – including the General Agreement on Trade in Services – include specific provisions at the micro-level. Thus, examining commercial policy formulation at the micro-level will allow for a robust treatment of the role of interests at the domestic and international levels of analysis.

But which commercial policies are considered? At the micro-level, relevant commercial policy includes not only trade and FDI but also domestic policies that directly influence competitiveness such as infrastructure development, competition policy, and safety or environmental regulation. As McGuire (1999) has noted, "In contrast to earlier decades where there was a clearer distinction between the outside world of trade and the inside realm of the domestic economy, industrial policy questions are now inextricably bound up in trade issues."[16] Peter Dicken (1992) captures the breadth of commercial policy in an era of economic globalization by arguing that states use three policy instruments to influence industry development: 1) trade policies, 2) FDI policies, and 3) industry policies.[17] All three of these commercial policy categories will be analyzed in this research.

Beyond providing an opportunity to examine the interplay between international and domestic interests, there is a second reason for examining commercial policy formulation at the micro-level: it will illuminate some key contemporary issues in IPE theory. These include the constraints imposed by economic globalization on state policy decisions, the effectiveness of TNCs as political actors, and the role of domestic and international institutions on micro-level policy outcomes.

Why The Air Cargo Industry?

Why focus on air cargo for purposes of this thesis? First, air cargo is an increasingly critical element of service infrastructure supporting economic globalization. According to The International Air Cargo Association,

> The last two decades have seen the development of global marketing and widespread international trade. Logistics has become a key business discipline. Global outsourcing and manufacturing is common with 34% of world trade (by value), moving by air. Whole industries now depend upon air cargo for the distribution and delivery of their product...The 21st century will herald the dominance of air cargo as an instrument in the expansion of world trade. It is expected that air cargo will dominate world trade in the same way that clipper ships, railroads, automobiles, and jet aircraft gave rise to new opportunities, new service areas, and created new economic benefits.[18]

These structural changes make air cargo service essential for developing or exploiting comparative advantage in many industries including communications equipment, electronics, pharmaceuticals, aerospace, agriculture, and professional services. The growth of electronic commerce and just-in-time production and delivery systems will only add to this trend.[19]

A second and related reason for examining air cargo is to understand the impact of upgrading service infrastructure on the economics and political economy of development. The efficiency of air cargo services impacts the competitiveness of agricultural and manufacturing exports, key elements of most developing economies. It also has a significant impact on the trade of intermediate goods, which experienced rapid growth in the late 1990s. The interests affected by air cargo service are therefore spread throughout the economy. The tradeoffs between economic and political factors in the context of economic development should therefore be illuminating. The research can also shed light on commercial policy decision-making in developing countries – a subject with a significant knowledge deficit amongst IPE and IR scholars.[20]

A third reason for focusing on air cargo is that while much of the IPE research to date has focused on air cargo's more glamorous cousin – passenger travel – air cargo is emerging as a large and important service business in its own right.[21] By 1998, air cargo was a $200 billion industry when related services such as logistics and freight forwarding are included. Projected growth of nearly 7%/year (roughly twice the rate of passenger growth) will lead to a tripling of worldwide air cargo business by 2015.[22] Moreover, air cargo has different market characteristics than passenger transport with important implications for IPE. Demand for air cargo is largely derived from patterns of international trade and production of goods, while air travel is closely linked to the dynamics of the leisure/tourism sector. Consumers account for the lion's share of demand for passenger travel, while businesses are the key air cargo customers. Another difference: while passenger travel is essentially an airport-to-airport service, air cargo is a sender-to-consignee service that often requires extensive in-country ground transport and logistics systems. This equates to a stronger requirement for foreign direct investment (FDI) than passenger travel service. Finally, the scale of air cargo global networks is broader than passenger networks. The largest air cargo firms operate in more than 200 countries, a number far in excess of the largest passenger airlines.[23]

The fourth and final reason for focusing on air cargo is that it has the potential to be a very good "test case" for understanding changes in commercial policy development at the micro-level. As previously noted, air cargo has traditionally been heavily regulated by the state, and is an industry where states can leverage one of their strongest bargaining chips: control over territorial access. Even the U.S. -- a key protagonist for service liberalization in the World Trade Organization -- considers air transportation to be a "strategic" sector with strict limits on foreign ownership of U.S. airlines.[24] At the same time, air cargo TNCs are seeking to build seamless, global networks with minimal impediments to operation. With such traditionally robust state involvement in international air transportation, understanding the factors shaping commercial policy changes yields an opportunity for contribution to IPE theory.

Why Focus On The 1990 – 1999 Timeframe?

The timeframe selected for this research is 1990 – 1999. There are several reasons for selecting this time period. First, the research findings will be timely and relevant – particularly with governments and international organizations placing more emphasis on service sector competitiveness and efficiency.

Second, it is during this timeframe that the largest air cargo TNCs developed truly global networks. FedEx and UPS both established Asian and European networks during the 1990s to complement their core North American networks. DHL and TNT also made significant investments in their global networks during this timeframe. The establishment of these networks required large amounts of foreign direct investment, liberal aviation route authority, and/or government reform of key support functions such as customs operations. Thus, this timeframe presents an opportunity to observe the interplay between the interests of large, global TNCs and state governments, the primary regulators of air cargo activity.

The third and final reason for focusing on this timeframe is the growing influence of air cargo on world trade. Due to changes in production patterns, lighter and cheaper goods, falling real costs of air transport, and general trade liberalization, the share of world trade (by value) carried by air cargo increased substantially during the 1990s. Thus, air cargo gained the attention of many policy makers as both a byproduct and a facilitator of trade; in some cases this led to a new phenomenon: air cargo-specific development plans.

Why Focus On the Philippines and Taiwan?

Understanding policy reform at the "micro-level" or sectoral level is a complicated and time-consuming endeavor. Air cargo is no exception with numerous interests and institutions engaged in the development of a broad array of commercial policies that range from traditional trade policies to sector-specific "industrial" policies. A detailed examination of a large sample of states is therefore neither feasible nor desirable within the scope of a Ph.D. dissertation. The air cargo policies of two states in the Asia-Pacific region, the Philippines and Taiwan, are the focus of this study.

Why analyze the Philippines and Taiwan? The first reason is location. Both states are centrally located in East Asia, a region composed of states highly dependent on manufactured exports (especially electronics goods) that are separated from each other and global markets by vast distances of water. [25] Moreover, the central location of both states in the economic corridor stretching from Beijing, Seoul, and Tokyo in the north to Singapore, Jakarta, and Kuala Lumpur in the south makes them ideal locations for regional air cargo hubs (Figure 1.1). Like Hong Kong and Guangzhou, both states are within three hours flight time of most major economic centers. The Philippines and Taiwan therefore share an important comparative advantage -- location – in one of the fastest growing markets for air cargo services.

A second reason for selecting the Philippines and Taiwan is that both states successfully bargained with air cargo TNCs to establish major hubs in their territories. FedEx, DHL, and

TNT all operated their primary Asian hubs in the Philippines during the study timeframe while UPS established its regional hub in Taiwan in the mid-1990s. The firm-state negotiations surrounding the establishment of these hubs, particularly those involving FedEx and UPS, were particularly intense. Scholarly analysis of bargaining circumstances and outcomes thus affords the opportunity to evaluate the ability of TNCs to influence government policy decisions.

Figure 1.1: Favorable Locations For Air Cargo Hub In East Asia

The final reason for evaluating the Philippines and Taiwan lies in their notable differences in political and economic circumstances. Politically, the Philippines is a fragile democracy operating in the shadow of the Marcos dictatorship with a history of weak government coordination of economic interests. In contrast, Taiwan features a strong central government that often plays a significant role in economic planning and development.[26] The two states also differ in their participation in international organizations. While the Philippines participates in an array of international organizations, Taiwan, as a *de-facto state*, is barred from many important organizations including the United Nations and the World Customs Organization.[27] It also was not a member of the World Trade Organization during the study period. The economic contrasts are also compelling. The Philippines is an economic laggard in the region with a 1998 per capita GDP of $1,200 ($3,500 purchasing power parity) and 32% of the population living in poverty; Taiwan is one of the wealthier Asian countries with a per capita GDP of $10,900 ($16,500 purchasing power parity). There is also a clear contrast in the economic importance of trade, as Taiwan derives 30% of its GDP from exports, while the comparable figure for the Philippines is 11%.[28] Finally, there is a clear contrast in domestic air cargo capability, with the Philippines having relatively limited capability and Taiwan possessing internationally competitive firms – China Airlines and EVA Airways. When combined, these sharp contrasts in political and economic circumstances will facilitate the validation or rejection of IPE and IR theoretical propositions outlined earlier in this chapter.

Research Methodology

This research project consisted of two major tasks. The first task, which is descriptive in nature, was to identify the key changes in air cargo commercial policy, and their economic consequences, over the 1990 - 1999 timeframe. The second task, an explanatory undertaking, was to determine which factors influenced national government decisions to implement these policies.[29] Determining why particular air cargo policies were adopted (and rejected) is the crux of this research project.

The empirical sources for this project included secondary and primary sources of information. The secondary sources of information were fairly traditional, including official government documents and trade statistics, IGO and NGO publications, company and industry association reports, journal articles, newspapers, books, and the Internet. Primary sources included interviews with 111 people conducted over the 1999 – 2001 timeframe. The breakdown of interviewees included 37 senior and mid-level government officials, 45 business executives with air cargo firms and TNCs, six officials with international organizations, nine executives with chambers of commerce and industry associations, and 14 professionals with international law firms, air cargo consultancies, non-governmental organizations (NGOs), airport authorities, and air cargo publications. In many cases, one or more follow-up interviews were conducted with the same individual, which expanded the total number of interviews to 153.[30]

This study required significant use of primary information sources for three reasons. First, understanding *why* particular decisions were made often requires interviewing decision-makers themselves to calibrate their version of events with other interests that were involved in negotiations. Fortunately, many senior government officials and business executives involved in major policy decisions were willing to be interviewed for this research. Second, many states consider particular details of some commercial policies, such as international air service agreements, to be proprietary and do not normally make official documentation available to the public. Assembling a list of commercial policy changes was therefore a challenging task that required a broad array of interviews with business interests and government officials to complete. Every effort has been made to leave out of this dissertation details of commercial policies that are considered proprietary. The final reason for the emphasis on primary sources has already been mentioned – there is a dearth of published IPE research on the air cargo industry. There are few scholarly studies or even general surveys on the air cargo industry; most references are in the context of broader surveys of the air travel industry. Government documentation and policy statements also tend to subordinate air cargo to the transport of passengers. Original research with significant use of primary sources was therefore required to develop the depth of understanding required analyze the questions posed in this dissertation.

INTERESTS, INSTITUTIONS, AND IDEAS

With the dependent variable defined as air cargo policy changes in the Philippines and Taiwan, the next task is to establish a theoretical framework for analyzing the factors (independent variables) that influenced these decisions. There are a variety of IPE and IR theories that promote alternative explanatory frameworks for policy outcomes in the international system. Realism, for example, might seek to explain policy outcomes primarily in terms of state interests and balance of power. The so-called liberal paradigm, in contrast, might emphasize the role domestic structures and institutions in policy outcomes. Rather than undertaking this research in a deductive fashion with the aim of proving or disproving one or more of these theories, the approach will be inductive and empirical. The aim will be to keep the fact-finding prism open as wide as possible to create a solid empirical base; only after this base has been established will the focus turn to abstraction on IPE and policy reform. Domestic and international factors will be given equal credence, as will the role of interests and institutions. In this spirit, economist Jagdish Bhagwati (1988) has postulated a comprehensive yet parsimonious taxonomy for policy reform when he noted that commitments to policies are generally due to a mix of interests (as defined by economics and politics) and institutions (as they shape constraints and opportunities), and ideological factors in the form of ideas and example.[31] The influence of these three factors – interests, institutions, and ideas – will be the prism through which commercial policy outcomes in air cargo are analyzed. They are the independent variables for this research.

Interests

Which interests could potentially influence commercial policy outcomes? At the international level of analysis, the interests of states must be included in this inquiry with bilateral aviation access treaties (negotiated between governments), one of the most pervasive forms of air cargo regulation. In addition to state interests, the interests of air cargo TNCs must be examined in relation to policy outcomes. Susan Strange and John Stopford (1991) have argued that with the onset of globalization the interests of transnational corporations are not only important, but often decisive in determining policy outcomes as part of a "triangular bargaining" process between firms and states.[32] Beyond air cargo TNCs, there are other international interests with a potential stake in policy outcomes, including firms dependent on air cargo service, freight forwarders, and industry associations.

Domestic interests can also be an important factor in shaping policy preferences. This in not a new concept, as Adam Smith described the influence of rent-seeking behavior by domestic firms in *The Wealth Of Nations* two centuries ago.[33] Examples of domestic interests that could play a factor in outcomes include domestic air carriers, labor groups, freight forwarders, airports, air cargo customers, and industry associations. Air carriers, which are usually large employers and are often regarded as national status symbols, have a well-documented history of wielding influence with their home governments in many countries.[34]

Institutions

Institutions, defined as formal and informal constraints on human behavior, may also play a role in policy outcomes.[35] Stated differently, institutions – through laws, constitutions, and less formal means such as customs and traditions -- create the "rules of the game' by which domestic and international interests interact with policymakers. Domestic institutions, according to Robert Keohane and Helen Milner (1996), can have independent effects on policy outcomes by creating rules for decision making, structuring agendas, and offering advantages to certain groups or interests while disadvantaging others.[36] Domestic institutions can range, at one extreme, from powerful state-sponsored business associations that try to forge consensus among economic interests (e.g. Japan's Keidanren) to, at the other extreme, a laissez-faire approach where firms compete in a free market, business associations play no meaningful role, and the government makes rules and mediates disputes.[37] In addition, the overall structure of government (e.g., interactions between branches of government) and the role of the lead ministry for policy formulation should be considered. Radical sectoral reform, for example, might be easier to achieve in a state with an autocratic or parliamentary government design than one with independent executive, legislative, and judicial branches.[38] Less formal customs and traditions, such as the acceptance of corruption, can also impact policy outcomes.

International institutions can also play a meaningful role in policy outcomes. Scholars in the regime theory tradition, such as Stephen Krasner (1983), have argued that implicit principles, rules, and decision-making procedures deriving from international regimes and organizations exert increasing influence on national policy decisions.[39] This line of reasoning holds that membership in intergovernmental organizations such as The World Trade Organization, The World Customs Organization, The Asia-Pacific Economic Cooperation, or The International Civil Aviation Association could potentially influence air cargo policy outcomes.

International institutions may also affect the nature of state interaction with transnational corporations. Thomas Risse-Kappen (1995) posits that the more an issue-area is regulated by bilateral agreements, multilateral regimes, and/or international organizations, the more permeable should state boundaries become for transnational interests.[40]

Ideas

Yet another factor influencing policy outcomes – but often overlooked – is the influence of ideas on policy elites and their advisors. As Douglass North (1990) has argued, ideas and ideologies shape the subjective mental constructs that individuals use to interpret the world around them and make choices.[41] These mental models can sometimes be decisive in filtering out or embracing the demands of particular interests or institutions. A social scientist analyzing policy decisions by former Prime Minister Margaret Thatcher, for example, would have missed something significant without considering the role of ideas in her policy decisions.[42] The notion that "ideas matter" is very much in line with the first image of Kenneth Waltz's theory (1959) of international relations – the mental make-up of the leader or policy elite.[43] An example of the role of ideas is the influence of "neoclassical" economics on sectoral commercial policies in some countries over the last two decades. The neoclassical view emphasizes small government, efficient capital allocation, and low impediments to imports as a means of maximizing resources on those activities in which the economy has a comparative advantage, leaving other forms of production to other nations. It is a prescription for free trade and minimal regulation, unless there is a market failure.[44] This ideology has influenced sectoral deregulation and liberalization in countries as diverse as the U.K., Mexico, and Chile. A relevant example in the aviation sector was the initiative to deregulate the U.S. domestic aviation market spearheaded by Transportation Secretary Alfred Kahn in the late 1970's *against* the wishes of key aviation interests.[45]

Ideas can also be a catalyst for sectoral protection. A good example is the influence of dependency theorists in Brazil on the import-substitution policy in the computer sector at a time when much of the world was embracing global supply and common standards as a means of enhancing productivity in information technology.[46] And on a much larger scale, the role of socialism as an idea has had a pervasive effect on sectoral policies in scores of states this century. As Karl Popper has wrote in *The Open Society and Its Critics* nearly forty years ago,

> Lenin's Socialism became the basis of a development that changed the whole economic and material background of one-sixth of the world. In a fight against tremendous odds, uncounted material difficulties were overcome...and the driving power of this development was the enthusiasm for an idea.[47]

Synthesis of Interests, Institutions, and Ideas

The taxonomy of *interests, institutions, and ideas* defines the empirical framework for this study, as depicted in figure 1.2. These are the prisms through which causal explanations for policy outcomes will be analyzed. The empirical framework includes both domestic and international levels-of-analysis influence on air cargo policy decisions made by national government officials.

Figure 1.2: Empirical Focus Of Research

← Factors influencing commercial policy →

<table>
<tr><th>↕ Level of analysis</th><th>INTERESTS</th><th>INSTITUTIONS</th><th>IDEAS</th></tr>
<tr><td>INTER-NATIONAL</td><td>Influence of other states

Influence of transnational interests</td><td>Role of international organizations and institutions</td><td rowspan="2">Influence of ideas / ideology on decision makers and advisors</td></tr>
<tr><td>DOMESTIC</td><td>Influence of domestic interests</td><td>Role of domestic institutions</td></tr>
</table>

As mentioned earlier, a key criterion for selecting this empirical framework is to keep the fact-finding prism as open as possible is seeking causal relationships. Including both domestic and international levels-of-analysis addresses a concern of some IPE scholars who see the futility of artificially separating domestic and international factors in an increasingly interdependent world. Andrew Moravcsik (1993), for example, evokes the image of policy makers as “Janus-faced” – forced to balance international and domestic concerns simultaneously.[48] This empirical framework also addresses the widely used “three images” schema of Kenneth Waltz (1959), who argued that policy outcomes are influenced by international, domestic, and individual-level explanations.[49]

The empirical framework does not imply that *interests, institutions,* and *ideas* work in isolation from one another; they are often interrelated in their impact on policy outcomes. Jagdish Bhagwati (1988), for example, has argued that institutions can create opportunities for interests, even spawning them; in turn, they can be shaped by them.[50] An example of this phenomenon is underscored by reforms in China carried out by Deng Xiaoping in the late 1970s. Influenced by free-market ideas, he led the effort to reform China's domestic institutions through decentralization and the creation of Special Economic Zones. As international trade brought about by these reforms showed benefits, he formed alliances with domestic interests that benefited from growing trade, thus securing the direction of reform against political opponents.[51]

The Backdrop Of Circumstances

One final point needs to be made relative to the taxonomy of interests, institutions, and ideology. Their influence on policy outcomes must be considered against the backdrop of prevailing circumstances. In some cases, the onset of a crisis or an event can provide the impetus for policy reform. As John Williamson and Stephen Haggard (1994) have noted, crises can have the effect of shocking countries out of traditional policy patterns, disorganizing interest groups that typically veto policy reform, and generating pressure for politicians to change policies that can be seen to have failed.[52] Similarly, David Henderson (1998) believes that economic stagnation in the 1970s set the stage for the current popularity of economic liberalism.[53] Although it is unclear at the outset of this research that circumstances and/or crises had a significant impact on air cargo commercial policy, their possible contribution will remain in the empirical viewfinder throughout the study.

THE STRUCTURE OF THE STUDY

The structure of this study consists of eight chapters. Chapter Two will briefly trace the history of the air cargo sector and outline the industry structure, market segments, and key actors. This chapter will also assess the macro-economic impact of air cargo service, including its impact on productivity, welfare creation, and trade facilitation. Finally, state commercial policy instruments will be identified, with an analysis of how they affect air cargo interests.

Chapter Three will characterize the political and economic circumstances confronting the Philippines and Taiwan and identify the major changes in air cargo commercial policy over the 1990 – 1999 timeframe. The next chapter will assess the economic consequences of these policy choices, including their impact on trade, foreign direct investment, and employment. Chapter Four will also include an analysis of international air service agreements. To what extent did air service rights align or diverge with patterns of international trade?

The focus of the study then shifts to the explanatory – *why did these policy changes occur?* Following the framework depicted figure 1.2, Chapters Five, Six, and Seven will assess the influence of interests, institutions, and ideas in a levels-of-analysis approach. Chapter Five will concentrate on the role of domestic factors on policy decisions, including the effect of domestic interests, the role of domestic institutions, and the influence of ideas/ideology espoused by government decision makers. Chapter Six analyzes the influence of transnational interests, including TNCs, industry associations, and chambers of commerce.

The focus of Chapter Seven is to assess the role of state-state bargaining and the influence of international institutions of air cargo policy outcomes.

Chapter Eight, the conclusion, will review the findings of this research and highlight the interactions between interests, institutions, and ideas. Synthesizing the empirical evidence from the previous three chapters, which factor(s) had the greatest influence on policy outcomes in each country? To what extent did their influence vary by policy category? In answering these questions, the validity of the working hypothesis, that states are losing the ability to independently create air cargo commercial policy, will be assessed. At the same time, some qualified generalizations for contemporary issues related to IPE theory will be developed, including:

- To what extent did the interests of other states drive policy outcomes?
- How much influence on air cargo policy did international institutions exert?
- What was the relative influence of TNC interests in policy outcomes? In which situations did they have the most bargaining leverage?
- What role did domestic institutions play in air cargo policy outcomes? How did they attenuate the influence of domestic and transnational interests?
- Did ideas and ideology play a meaningful role in government policy decisions?

With the key parameters of the research defined, the focus now shifts to Chapter Two – an overview of the air cargo industry.

NOTES

[1] See Baldwin (1993) pp. 5-8, for a discussion of the "neorealist" perspective of international relations. "State" will be used throughout the thesis to designate a sovereign, legal entity in the international system – not to be confused with domestic political entities such as those found in the United States. See Jackson (1999) for a contemporary discussion on states and sovereignty. "State" will be used interchangeably with "nation," "national," and "country" throughout the dissertation.
[2] Strange and Stopford (1991), pp. 1-2.
[3] See Grieco (1990) chapters 1-2 for an overview of the "institutionalist" perspective of international relations.
[4] Kudrle found the most restricted sectors in developed countries are telecommunications, air transport, broadcasting, and land transportation. In *Multinationals In The Global Political Economy*, edited by B. Eden and E. Potter (1993), p. 149.
[5] U.S. Congress (1997).
[6] See Hobsbawm, (1979).
[7] Yeats, (1998).
[8] See Henderson (1998), Krugman (1996), and Weiss (1998).
[9] See the October 1998 issue of *Global Finance.* Rating was based on percentage of foreign sales and employees, number of countries in which a company operates, and a subjective rating based on the global nature of the sector.
[10] Interviews.
[11] See Henderson (1998).
[12] See North (1990), pp.3-4.; Milner (1997) p. 18.
[13] Boeing Commercial Airplane Marketing Group (1998), p. 52.
[14] Examples include Wade (1990), Henderson (1998), Bates and Krueger (1993) and Williamson (1994).
[15] Wade (1990), p. 30.
[16] McGuire, Steven, *"Firms and governments in international trade,"* p. 147, in Hocking and McGuire (ed.) (1999).
[17] Dicken (1992), p. 151.
[18] The International Air Cargo Association (1998), pp. 13, 29. See http//:www.tiaca.org for more information.
[19] See Hubner (1999). Several leading air cargo consultancies, including MergeGlobal (http://www.mergeglobal.com) and The Colography Group (http://www.colography.com) have also documented these trends. A recent MergeGlobal perspective is outlined in the May 2000 issue of *Air Cargo World.*
[20] I attribute this point to Dr. Razeen Sally of the London School of Economics.
[21] Examples of IPE research focused primarily on passenger travel include Gidwtiz (1980), Jönsson (1986), Krasner (1985) pp. 196-226, Milner, Helen, "The Interaction of Domestic and International Politics," in Evans *et al* (1993), Nayar (1995), Sampson (1984), Sochor (1991), and Zacher (1996).
[22] *Aviation Week & Space Technology* , 23 March 98. Although difficult to pinpoint, the estimated size of the air services portion only is about $40 billion.
[23] The largest air cargo firms referred to here include DHL, FedEx, UPS, and TNT.
[24] Current U.S. law limits foreign ownership of an air carrier to 25% of voting stock. The U.S. also prohibits operation of domestic flights by foreign carriers (also referred to as *cabotage*). The United States is one of the biggest stumbling blocks to the comprehensive inclusion of air services in GATS.
[25] Asia makes more than half of all finished computers and is a leading supplier of high value electronic components including memory chips, microprocessors, LCD screens, modems, and motherboards. See *Asia Week*, August 9, 1996.
[26] For an analysis of Taiwanese institutions, see Wade (1990); for the Philippines, see Abueva (1998); for a comparison of the two states, see Kuo (1990).
[27] Scott Pegg defines a de facto state as an entity that lacks recognition as a legitimate state in the international system that: 1) has organized political leadership through indigenous capability; 2) receives popular support; and 3) has achieved capacity to provide governmental services to a given population in a specific territorial area over a significant period of time. See Pegg (1998), p. 26.
[28] Sources: *The Economist*, May 11, 1996; Philippine National Statistical Control Board; Taiwan Department of Statistics (www.moea.gov.tw), accessed January – March 2000; Central Intelligence Agency (1999); and the WTO (1999).

[29] Explanatory research is defined as research that tests propositions explaining of the nature of certain relationships. For a discussion of alternative research methodologies, see Zikmund (1984).
[30] The breakdown of the 153 interviews by category is: 55 government officials , 62 business executives, 7 international organizations, 11 industry associations/chambers of commerce, 18 other. A listing of interviewees is in the appendix.
[31] Bhagwati (1988) , pp 17-18. The term "ideas" will be used in lieu "ideology" in Bhagwati's conception henceforth.
[32] Stopford & Strange (1991), pp. 1-2; also see Sally (1995) and Lawton (1997) for analyses of firm-state bargaining for particular industries.
[33] Smith (ed.) (1964), pp 407-408.
[34] See Jönsson (1986), Milner, Helen, "The Interaction of Domestic and International Politics," in Evans *et al* (1993), Nayar (1995), and Sochor (1991).
[35] North (1990), p.3.
[36] Keohane, Robert O. and Milner, Helen V.(1996), p. 4.
[37] For a discussion of types of domestic economic institutions, see Kuo (1995), pp. 30-38.
[38] See Milner (1997), p. 19. I am indebted to Dr. Razeen Sally of The London School of Economics for the point regarding the role of the lead trade ministry.
[39] Krasner (1983), p.2.
[40] Rise Kappen (1995), p.7. The author defines "transnational" as non-governmental and non-domestic.
[41] North (1990), p. 111.
[42] In her autobiography, Thatcher noted that books such as F. Hayek's *Road To Serfdom* "left a permanent mark on my own political character, making me a a long-term optimist for free enterprise and liberty..." See Thatcher (1993), pp. 12-13.
[43] Waltz (1959).
[44] Wade (1990), pp. 9-11.
[45] See Taneja (1979) p.9.
[46] Examples of dependency theorists include Frank (1966), Galtung (1971), and Cardosa and Faletto (1979).
[47] Popper (1966), p.108. The first edition of this work was published in 1962.
[48] Moravcsik, Andrew, *"Integrating International and Domestic Theories of International Bargaining,"* p. 15. In Evans *et al* (1993).
[49] See Waltz (1959). Singer (1960) also argued for the utility of three levels of analysis in analyzing international conflict.
[50] Bhagwati (1988), p.41.
[51] Domestic interests included agricultural concerns and light manufacturing firms in China's coastal provinces. See Shirk, Susan L, *"Internationalization and China's Economic Reforms."* In Keohane and Milner (1996), pp. 186-206.
[52] Examples include Poland (1990), Mexico and Korea (1987), and South Korea (1979). Williamson, John and Haggard, Stephen, "The Political Conditions for Economic Reform, pp. 562-565 in Williamson (1994). Other studies that analyze the role of crises on policy reform include Bates & Krueger (1993) and Henderson (1998).
[53] Henderson (1998), pp. 94 – 95. Henderson refers to the influence of "events" rather than crises.

Chapter II: Air Cargo Market Structure And Commercial Policy

The purpose of this chapter is to describe the air cargo industry and government commercial policy instruments that regulate it. By understanding air cargo market dynamics and the impact of air cargo service on the broader economy, we are in a better position to understand the strategies and motivations of air cargo economic interests as well as the tradeoffs that government officials must confront in making air cargo commercial policy. Chapter Two has four key objectives and will devote a subsection to each: 1) to trace the historical development of the air cargo industry to the present; 2) to outline the structure and key actors in the air cargo industry; 3) to assess the macro-economic impact of air cargo service, and 4) to provide an overview of air cargo commercial policy instruments. Indeed, the subsequent analysis will show the symbiotic relationship that has developed between air cargo service and the globalization of economic activity.

A Brief History Of The Air Cargo Industry

The Early Years: Development Through 1960

The age of aviation can be dated to 1903 when the Wright Brothers, and then Captain Ferber in France, flew engine-powered planes. The first international flight between non-contiguous countries occurred between France and Britain in 1909. By 1926, the first U.S. air express carrier, National Air Express, was organized.[1] Insufficient speed, short range, limited lift capacity, and lack of coordinated airfreight facilities hindered the early development of air cargo service. By 1934, however, advances in aircraft technology allowed Lufthansa to become the first airline to provide airmail service across the South Atlantic, linking Germany with Buenos Aires.[2] World War Two provided a tremendous impetus to the air cargo industry. At the end of the war, the availability of large quantities of surplus aircraft and trained pilots coupled with the awareness of air as an effective and potentially profitable means of transport, led a number of ex-servicemen such as Arthur and Raymond Norden (founders of Seaboard World Airlines), and Robert Prescott (founder of Flying Tiger) to purchase military surplus aircraft and start air cargo operations.[3]

In 1944, delegates from 52 countries gathered in Chicago to sign the Convention on International Civil Aviation, which specified that international air transportation would be regulated by bilateral negotiations between national governments. The convention – now known as the Chicago Conference -- came into force on 4 April 1947 after it was ratified by 26 states. The intergovernmental International Civil Aviation Organization (ICAO) was created, forging a regime that governed technical, legal, and operational aspects of aviation and allowed airlines to set their own rates subject to government approval. In parallel with the formation of ICAO, a significant bilateral agreement was signed between Britain and the U.S. in 1946. This treaty, known as the Bermuda Agreement, included a formula for granting reciprocal rights to designated carriers and was to serve as the model for all future bilateral air service agreements between states.[4]

Another significant organization was created in this timeframe – the International Association of Transport Airlines (IATA). Composed of the world's leading airlines, IATA was created to provide information and policy suggestions to ICAO on technical issues, and to focus on commercial issues such as setting fares for passengers and cargo. By 1947, the post-war aviation system based on the general principles proclaimed in Chicago was firmly in place. Over 100 bilateral agreements had been signed and an IATA tariff-setting mechanism was officially recognized, first in the Bermuda accord and in other agreements that followed in quick succession.[5]

Air cargo business continued to develop in the late 1940's as passenger airlines and new all-cargo carriers entered the market. Passenger airlines pursued the cargo business primarily as incremental revenue to supplement their core passenger business. As a result, they were often able to price on the basis of marginal costs, a luxury not enjoyed by all-cargo carriers. In many cases, they also enjoyed state financial support if not outright ownership. In the U.S., significant price competition led to industry consolidation and by 1948, only six all-cargo operators were still in business. As a result, the U.S. Civil Aeronautics Board (CAB) established minimum rates to prevent excessive price competition. In 1955, the CAB authorized the first U.S. all-cargo carrier (Seaboard) to offer service across the Atlantic on a subsidy-free basis.[6] In Europe, BOAC (now British Airways) established early air transportation leadership while continental airlines such as Lufthansa and KLM Royal Dutch Airways emerged from the devastation of World War Two to establish significant fleets and route structures by the late 1950s.

The Jet Age and U.S. Deregulation, 1960 - 1980

A dramatic change in the competitiveness of air cargo as a transportation alternative took place in the late 1950's with the introduction of jet aircraft. The Boeing 707 and McDonnell Douglas DC-8 dramatically increased cargo carrying capacity and speed compared to the piston and turboprop-powered aircraft of the day. Passenger airlines suddenly had the capability of carrying up to 150 passengers and significant amounts of cargo in the belly of the aircraft. By 1965, passenger/cargo "combination" carriers with jet aircraft flooded market with capacity. All-cargo airline Flying Tiger asked the U.S. Civil Aeronautics Board to reintroduce minimum pricing levels that had been rescinded in 1961; the petition was denied. Flying Tiger remained marginally profitable until the Vietnam War, when it was granted increased route authority to Pacific states to deal with a back-haul problem from Vietnam. As a result, its route authority increased from 3,906 to 17,357 miles. While Flying Tiger focused on the Asia-Pacific market, another U.S. carrier, Seaboard, grew by focusing on Europe – North America routes and providing cargo capacity for European airlines such as Lufthansa, Swissair, and British Overseas Airways Corporation.[7] In 1964, KLM Royal Dutch Airlines became the first European air carrier to operate an all-cargo DC8, with 35,000 kg. of capacity.[8]

In 1969, Boeing introduced the revolutionary 747 aircraft with capacity for more than 350 passengers or approximately 100 tons of cargo in an all-freight configuration. Much like fiber optics revolutionized the telecommunications industry, the introduction of "wide-body" aircraft like the 747, Douglas Aircraft Company DC10, and Airbus A300 revolutionized air cargo by reducing air transportation costs and extending aircraft range to speed transport time and avoid costly refueling stops. Lufthansa became the first European airline to introduce an all-cargo 747 in 1972.[9] World scheduled air cargo traffic grew at annual rates of 18% in 1960s and 11% in 1970s to reach more than 25 billion revenue-ton-kilometers (RTKs) by 1980.[10]

American entrepreneur Frederick W. Smith founded Federal Express in 1971 based on a term paper he wrote as a Yale undergraduate and studies indicating that 10% of the U.S. air cargo market required overnight service. At this stage, air cargo moved principally between major airports and took days for delivery, as numerous third parties were involved in the delivery chain to and from airports. Smith found that in the United States, 75% of packages did not originate or go to one of the 25 major markets that received most airline focus. Leveraging a loophole in Civil Aeronautics Board regulations forbidding airlines from also providing ground delivery service, Federal Express inaugurated its service with Falcon business jets and limited package weight to 70 lbs. By 1979, Federal Express served 100 airports and 10,000 communities. To meet the demanding requirements of overnight delivery, Federal Express developed a "hub and spoke" network design and selected Memphis as its primary hub based on its central geographic location, good weather, and reasonably priced real estate.[11] While Federal Express focused primarily on the U.S. market, another new firm – DHL International-- initiated door-to-door international express service the 1970's.

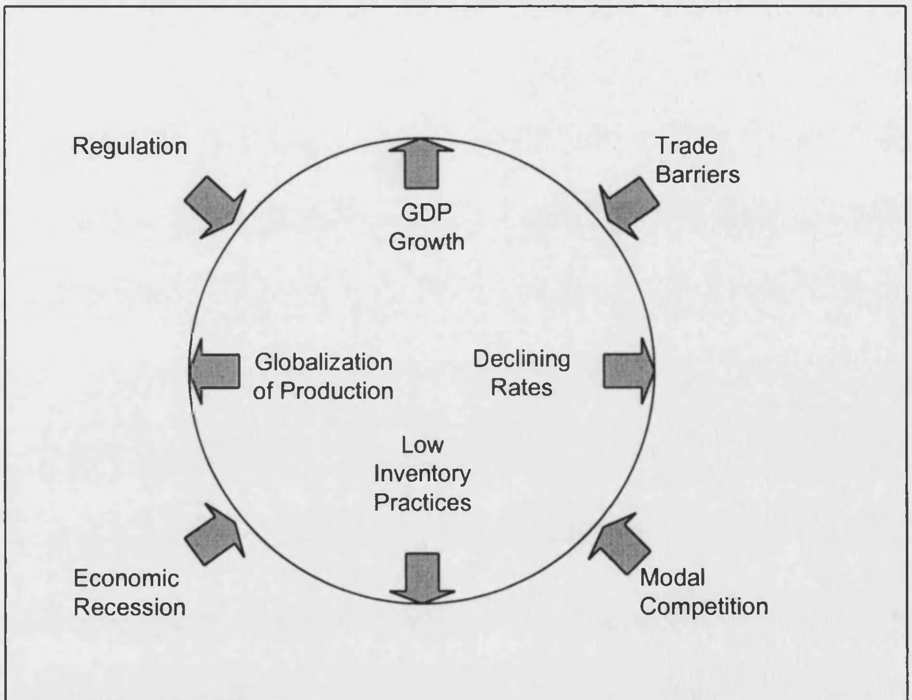
In 1977, the domestic U.S. air cargo market was deregulated. Entry into the market was now opened, carriers were free to set schedules and tariffs, and regulations were eliminated that prevented integrated air/ground delivery service. Unlike proponents for deregulation of the passenger business (which followed one year later), proponents of cargo deregulation did not argue that it would result in lower prices. In the air cargo business, prices were low and so was quality; shippers were willing to pay more for better service. U.S. Secretary of Transportation Alfred Kahn, the chief architect of deregulation, was sympathetic to their concerns. Immediately, Flying Tiger expanded domestic routes to complement its international route network and Federal Express was cleared to operate larger jet aircraft to build an integrated air/ground service network. Soon, air cargo carriers were urging the U.S. government to eliminate IATA-governed tariffs and quotas for international cargo traffic. In 1978, the U.S. deregulated domestic passenger travel, allowing passenger carriers –key players in the cargo business – the freedom to determine routes and pricing. By 1979, the U.S. Civil Aeronautics Board issued an order to show why it should not withdraw from IATA traffic conference machinery.[12] The consequences of U.S. air transportation were significant not only to the air cargo industry, but also to the broader trend of economic reform. David Henderson (1998) has argued that Alfred Kahn, along with China's Deng Xiaoping, stand out as the leading figures of the advance guard of world reformers in the late 1970's.[13]

The Emergence of Global Networks, 1980 - 1999

The air cargo industry experienced significant growth and restructuring over the 1980 – 1999 timeframe. A useful framework for understanding why this growth took place has been developed by MergeGlobal, an air cargo consultancy, which cites four factors that drove air cargo expansion: 1) world economic and trade growth, 2) globalization of production, 3) lean inventory strategies, and 4) declining air cargo rates.[14]

The first factor, growth in trade and economic activity, was a significant catalyst as world merchandise exports expanded from $2.134 trillion to $5.473 trillion over the 1980 – 1999 timeframe – a 5% annual rate.[15] The development of global supply chains during this timeframe also stimulated air cargo demand as trade in components, often requiring time-definite delivery to the final assembly site, grew significantly faster than trade in finished goods. By 1998, components and parts made up 30% of world exports, or some $800 billion of trade in manufactured products.[16] A third factor favoring expansion of air cargo was lean inventory strategies adopted by manufacturing TNCs. The popularity of air cargo grew as more and more firms focused on inventory reduction and embracing "just-in-time" production as a source a competitive advantage.[17] A final factor contributing to growth in air cargo demand was its improved value as a transportation alternative. Over the 1990 – 1999 timeframe, air cargo prices declined by an average of 2.8% per year.[18]

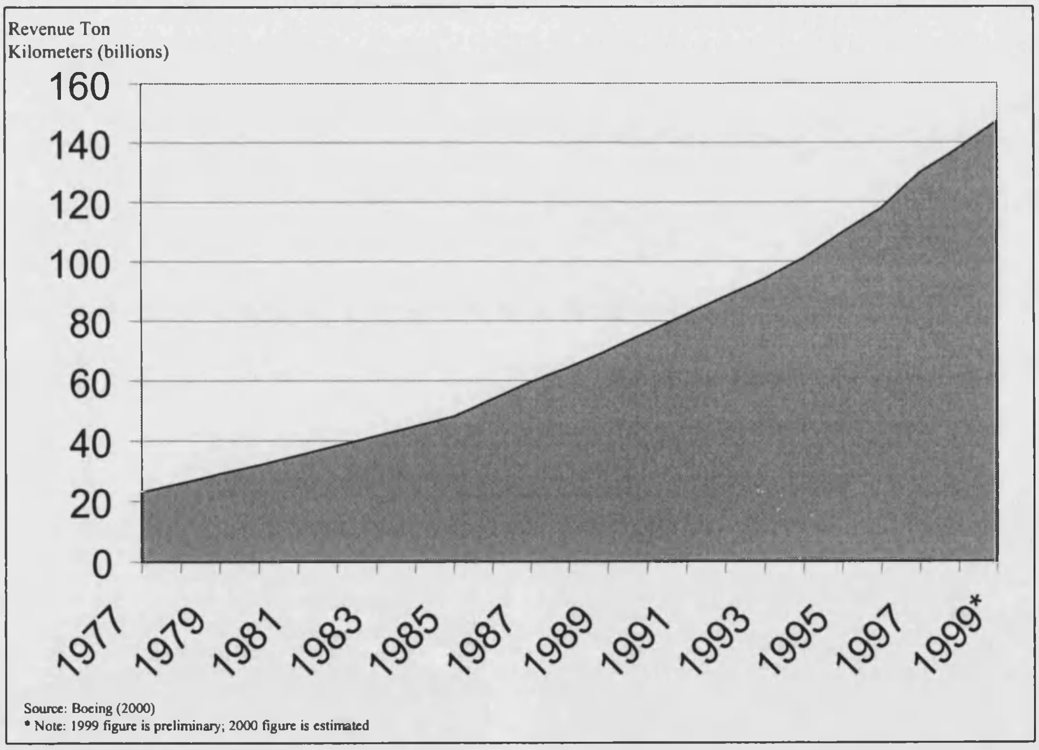
Figure 2.1: Forces And Constraints For Air Cargo Market Growth



Source: Adapted from MergeGlobal

There was also a loosening of constraints governing international air transportation in two key markets during this timeframe. The U.S. followed domestic deregulation with a major "open skies" initiative in the 1990's, which sought to deregulate many aspects on international air transportation including capacity controls and pricing constraints. Beginning with the first open skies treaty with the Netherlands in 1992, the U.S. had concluded over 35 open skies treaties governing passenger and cargo transportation by the close of 1999.[19] In Europe, European Council Regulation no. 294 commonly known as "The 1991 Air Cargo Deregulation" led to a liberalization of ownership rules among EU members, greater operational flexibility, pricing flexibility, and opening of routes and traffic rights for internal EU traffic. While deregulating air transportation services between EU members, this agreement did not supercede the right, granted at the Chicago Convention, of individual EU states to negotiate bilateral air service agreements with other states.[20] Thus a patchwork of regulation existed in Europe: state control of air cargo service outside the EU, with deregulation within the European market governed by competition policy from Brussels. Nonetheless, the general trend was toward liberalization.

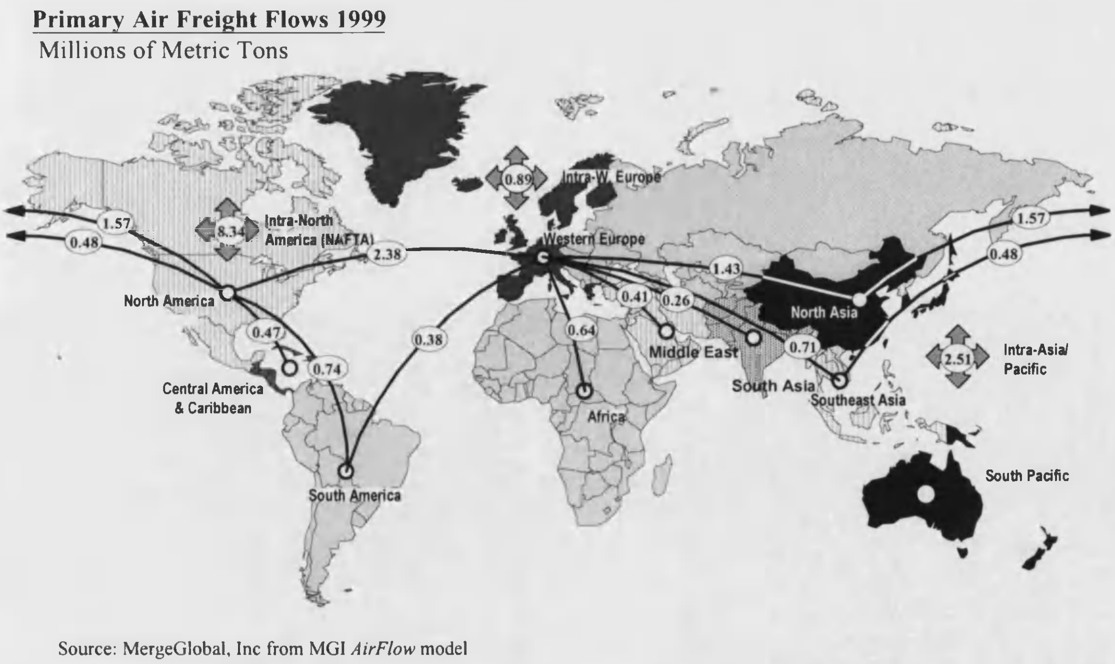
Figure 2.2: World Air Cargo Market 1977 – 2000
In Revenue-Ton-Kilometers (billions)



The combination of expansionary forces with a more liberal air transportation regime led to significant air cargo growth in the 1980s and 1990s. Total air cargo traffic, which was less than 25 billion revenue ton kilometers in 1975, grew at a 9% annual rate to exceed 130 billion revenue ton kilometers by 1998.[21] "Revenue ton-kilometer" is a common measure of cargo business activity; the figure is determined by multiplying the weight (in metric tons) of an air cargo load by the air cargo route length (in kilometers) for a revenue-bearing flight. A 100-ton load carried 5,000 kilometers, for example, would equal 500,000 revenue ton-kilometers.

In geographic terms, the intra-North American market was the largest regional market (in tonnage) in 1999 with 8.3 million metric tons moving by air. This contrasts with 0.9 million tons for intra-European traffic and 2.5 million tons for intra-Asia/Pacific. The major inter-regional routes were North America-Europe (2.4 million tons), North America – North Asia (1.6 million tons) and Europe-North Asia (1.4million tons).[22]

Figure 2.3: World Air Cargo Flows By Region, 1999



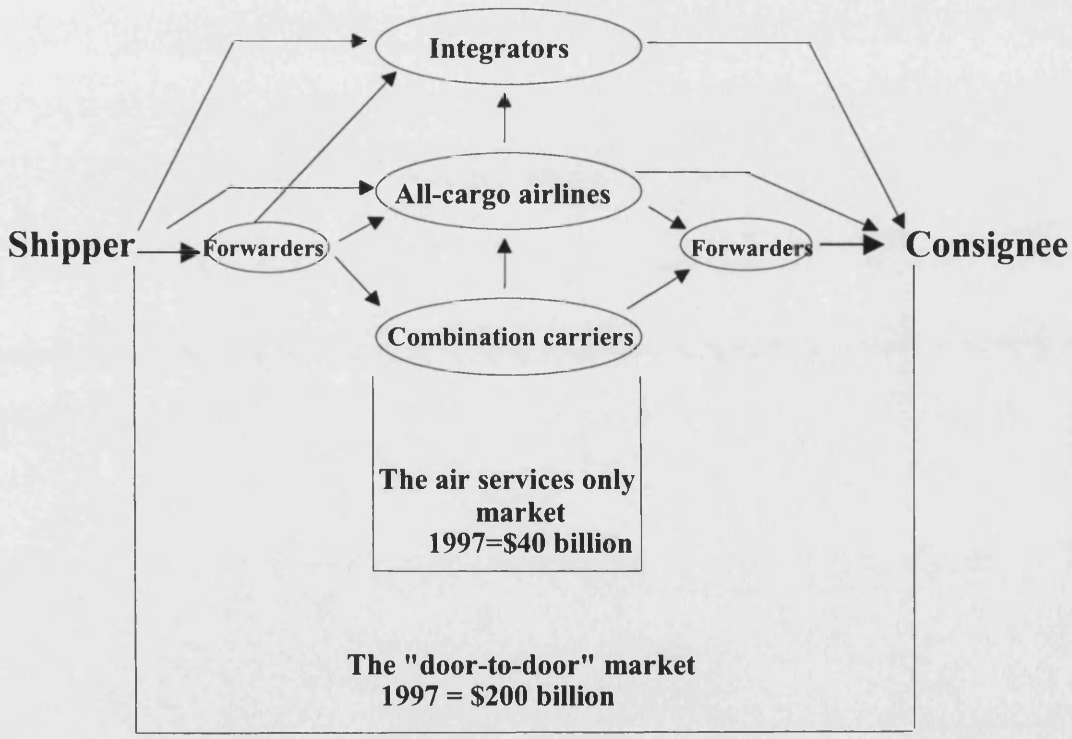
There were also significant developments on the supply side of the market during the 1980 – 1999 timeframe. A new class of suppliers known as "integrators" emerged to provide door-to-door service and 24-48 hour delivery based on the models successfully demonstrated by Federal Express and DHL. United Parcel Service, a major U.S. ground courier firm, entered the integrated cargo business by forming an airline in 1988.[23] TNT, an integrated delivery firm started in Australia, extended its global reach during this timeframe although it relied heavily on commercial airlines to provide air cargo capacity. In 1989, Federal Express acquired Flying Tiger, which gave the firm access to 21 international markets.[24] Collectively, Federal Express, DHL, UPS, and TNT became known as the "Big Four" air cargo integrators. To leverage market growth, the 'big four' moved to establish global networks during the 1990's. Federal Express established major hubs in Memphis, Subic Bay, (Philippines) and Paris; UPS in Louisville (USA), Cologne, and Taipei; DHL in Manila, Cincinnati, and Brussels; and TNT in Liege (Belgium). The decade concluded with European postal services organizations taking equity stakes in two of the "big four." In 1996, PTT Nederland (KPN), the privatized Dutch Post Office and telecommunications concern, acquired TNT Express for $1.5 Billion. In 1998, a new entity known as the TNT Post Group was created which combined TNT Express and the former Dutch Postal Service assets. However, the Dutch Government maintained 44% of the new entity.[25] Spurred by the TNT acquisition and its own looming privatization, state-owned Deutsche Post purchased 25% of DLH International in 1998.[26] Responding in part to the success of the integrators, Lufthansa became the first combination carrier to "spin off" its cargo business into a separate organization. As the industry's largest combination carrier, Lufthansa's cargo and logistics revenue reached the $2 billion plateau in 1998.[27]

Air Cargo Industry Structure

Industry Actors

The movement of goods by air involves three types of industry operators: 1) air carriers which operate aircraft and carry goods between airports, 2) integrators that provide door-to-door service as an integrated entity, and 3) freight forwarders which consolidate shipments for air carriers and pick up goods from shippers or deliver goods to consignees.

Figure 2.4: The Air Cargo Supply Chain



Source: The International Air Cargo Association (1998)

Viewed broadly, the "door-to-door" market for air cargo, including warehousing, shipping, forwarding, and transportation, is $200 billion. The air transportation portion represents about 20% of this market, or $40 billion.[28]

Air Carriers

Air carriers come in two forms: combination carriers that carry cargo principally in the belly of passenger aircraft and all-cargo carriers that operate dedicated cargo-only aircraft between airports. According to the International Air Transport Association (IATA), the largest international combination carriers at the mid-point of the study timeframe (1996) included Lufthansa, Korean Airlines, Air France, and Singapore Airlines. Notably, two Taiwanese carriers – China Airlines and EVA Air – were among the top 15 combination carriers. The air carrier supply base is relatively fragmented, as the top 25 carriers carry approximately 75% of international cargo.[29] This fragmentation is a by-product of the highly

Figure 2.5: 1996 Major International Air Cargo Carriers

(Tonne-kilometres performed in scheduled international services)

Airline	International Freight Ton Kilometers (FTKs) (billion)	Share of Carrier's Total FTKs which are international
Lufthansa	5,995	99.6
Korean Airlines	4,760	98.4
Air France	4,654	100
Singapore Airlines	4,116	100
KLM	3,780	100
Japan Airlines	3,605	92.7
British Airways	3,443	98.5
Cathay Pacific	3,180	100
Federal Express	2,946	37.7
China Airlines	2,396	90
Cargolux	2,021	100
EVA Air	1,933	90
United Airlines	1,903	73
Northwest Airlines	1,851	66.3
American Airlines	1,664	70.5

source: IATA/ 1997

regulated air transportation (passenger) market where governments have traditionally protected national carriers. It also reflects the relatively low entry barriers for airport-to-airport air cargo carriage. With more the 300 passenger airlines in operation and many of these airlines viewing belly space as an incremental revenue opportunity with little incremental cost, there is little to prevent a new air carrier from entering the market.[30]

Combination passenger-cargo carriers carry the bulk of the world's air cargo. In 1996, they carried approximately 75% of the world's total air cargo (in ton kilometers). Approximately 50% of this total was carried in the belly compartments of passenger aircraft and the remaining 25% were carried on freighter aircraft belonging to these airlines.[31] While these cargo carriage figures are impressive, the air cargo business is usually secondary to the core passenger business in revenue generation for most carriers. For many combination carriers, cargo business represents less than 15% of total revenue. The unit prices are also substantially lower than those charged by integrators.[32]

All cargo carriers –the second category of air carriers -- occupy a niche in the overall air cargo market. Focusing purely on airport-to-airport freight, these firms work cooperatively with freight forwarders, combination airlines, and even integrators to provide focussed capacity on key routes. Luxembourg-based Cargolux was the only all-cargo airline among the IATA top 15 in 1996, operating a fleet 10 747's with revenues of $403 million.[33] Other significant all-cargo airlines include Nippon Cargo Airlines (Japan), Atlas Airlines (U.S.) and Polar Air Cargo (U.S.). In total, combination and all-cargo carriers transport approximately 80% of air cargo traffic, and about 50% of air cargo revenue.[34]

Integrators

The previously mentioned "big four" integrated carriers – DHL, UPS, Federal Express, and TNT – far outstrip the size and reach of their nearest competitors and handle about 90%

of all international express traffic. The next largest integrator – U.S.-based Airborne Express – has a 2% share of the international express market.[35] As previously outlined, all four firms embarked on aggressive growth campaigns in the 1980s and 1990s in an effort to develop global networks in the belief that access to more destinations in more states would improve service and enhance competitive advantage.[36] By the end of the 1990s, all four TNCs had operations in more than 200 states. A comparison of the four in the mid-range (1997) of the study timeframe is shown in figure 2.6.

Figure 2.6: Comparison Of Major Air Cargo Integrators (1997)

Company	1997 International Express Market Share (% shipments)	1997 Revenues ($US B)	Number of Countries	Global Employees/ % foreign	Strengths	Weaknesses
DHL Worldwide Express (Belgium*)	40	$5.0	227	59,000 / 81%	Asian & European markets, global mentality, flexibility, small package focus	U.S. market, small aircraft fleet, scale, large package capability
United Parcel Service (US)	21	$22.5	200	331,500 / 11%	Ground capabilities, scale, U.S. market, information technology	Asian market
FedEx Corporation (US)	15	$11.5	211	141,000 / 11%	Large aircraft fleet, U.S. market, global route authority, information technology	European market
TNT Express (Netherlands**)	12	$7.6	200	106,000 / 41%	Dutch Government ownership/capital, European & Asian markets, flexibility	U.S. market, limited airlift capability, large package capability

Sources: Global Finance Magazine (10/98), Journal of Commerce, Company Reports

* Note: Deutsche Post (Germany) purchased 25% equity stake in DHL International in 1998, which was increased to 51% in 2000; the percentage of foreign employees figure excludes those in U.S. subsidiary DHL Airways.

** Name was changed to TNT Post in 1998;

DHL achieved a measure of fame in 1998 by being named "The World's Most Global Company" by one survey. It was selected on the basis of operations in 227 countries, serving 635,000 destinations, with the lions' share of sales and employees residing in foreign markets.[37] DHL is split into two operating companies for tax purposes: DHL International in Brussels, which focuses on international express traffic and is partially owned by Deutsche Post, and DHL Airways, based in the California, which handles domestic U.S. traffic only.

Thus, the nationality of firm for international operations was considered to be Belgian for the study timeframe.[38] When Deutsche Post assumed 51% ownership of DHL International in late 2000 (to complement German carrier Lufthansa's 25% stake), the nationality of the firm clearly became German. DHL is the market share leader for international express shipments and places particular emphasis for having on-the-ground presence and hiring "locals" in the markets it serves. Geographically, DHL exhibits particular strength in Europe and Asia-Pacific. However, DHL trails UPS and Federal Express significantly in the large domestic U.S. express market and also operates a smaller fleet of aircraft compared to its rivals (222 in 1999), showing a greater willingness to lease capacity from all cargo carriers and combination carriers.[39] DHL's strategic thrust throughout the 1990s has been to leverage the strong growth in international express demand.

TNT Post Group, which changed its name from TNT Express in 1998, is the leading player in the European express market, with a 22% share, followed by DHL with 20-21%, UPS with 10-11%, and Federal Express with 2-3%. In 1998, TNT sought to strengthen this position by investing $80 million in a European "super-hub" in Liege, Belgium. In contrast, TNT Post lacks a meaningful presence in the U.S. market, where it relies on a service agreement with American Airlines, which also provides coverage for South America. TNT Post was unique in relying almost exclusively on air capacity of other carriers to operate its network; in 1999, it changed course and announced that it would launch its own airline to operate within Europe.[40] While TNT Post seeks to capture growth in the international express market, it must also answer to its chief shareholder, the Dutch Government, which desires "an effective and efficient national mail delivery service."[41]

United Parcel Service (UPS) is the largest of the integrated air carriers by revenue, which totaled $22.5 Billion in 1997. A relative latecomer to the air cargo business, UPS' revenue is driven primarily by a North American ground delivery business. In total, UPS' ground fleet exceeds 150,000 vehicles. This ground capability is well suited to the relatively short international delivery routes of the European market, which generate more than $2B in annual revenues for UPS. The rapidly growing UPS aircraft fleet now includes 526 aircraft. Known as "Big Brown" by its competitors, UPS annually carries goods having value in excess of 6% of the U.S. GDP.[42] While UPS enjoys the greatest overall scale of the integrators, is it also the least global—garnering only 13% of its total revenues outside the U.S.[43] UPS spent much of the 1990's catching up with Federal Express in air cargo capability and expanding its global network. Not surprisingly, UPS lacks many of the international route authorities that its primary competitor developed through political activity and the acquisition of Flying Tiger. The establishment of an Asian hub in Taipei and increased governmental lobbying to increase Asian route authority were two initiatives in the 1990s to shore up its Achilles Heel: the fast-growing Asia-Pacific market.[44] UPS also expanded its presence in Latin America by acquiring Challenge Air Cargo, a U.S.-based all-cargo carrier, in 1999.

FedEx had the strongest air transportation capability of any firm in the air cargo industry during the study period.[45] FedEx's fleet in 1999 totaled 643 aircraft and 43,500 ground vehicles. Although sizable, the ground fleet is about one-third the size of the UPS fleet. This mix of capabilities is well suited for inter-continental, domestic U.S., and inter-Asian routes, but has less relative advantage in the domestic European market where FedEx's competitors are strong. As a result, FedEx recently re-established a European hub in Paris after closing down its hub in Liege, Belgium earlier in the decade. FedEx also addressed this gap by acquiring Caliber System, a $2.5 billion ground logistics firm, in 1998.[46] FedEx has long been active in lobbying the U.S. government for expanding international air route authority, and was a leading proponent of the U.S. "open skies" initiative in the 1990's. Liberalizing the Asia-Pacific market was a key element of FedEx's political strategy, which resulted in increased route authority to numerous Asian countries to complement the establishment of an Asian Hub in Subic Bay, Philippines.[47] FedEx also developed state-of-the-art in information technology and electronic commerce capabilities, providing real-time tracking information to customers via their office computers.

Freight Forwarders

Freight forwarders provide a valuable surface point to surface point link for shippers and consignees. They contract with air carriers for the physical carriage of goods, buy block space on their flights, and consolidate cargo from several air cargo carriers. Their role often extends beyond the physical transportation of goods to include customs brokerage, warehousing, inventory control, and supply chain management. Freight forwarders handled 60 million shipments across the world in 1996 and generated annual revenues of $42-48 billion. The Top 20 forwarders, including Air Express International, Schenker, Kuehne & Nagel, Panalpina, Airborne Express, and Burlington, handled nearly half of the total forwarding traffic. There was a general trend towards freight forwarder consolidation in the late 1990s. Perhaps the most notable event was the acquisition by Deutsche Post of major forwarders Air Express International (the largest U.S. air freight forwarder) and Danzas in

1999 and 2000. Overnight, Deutsche Post became the largest freight forwarder in the air cargo industry.[48]

On the regulatory side, the forwarder is viewed as an agent of the airlines. On the operational side, the role of the freight forwarder is becoming more ambiguous as some forwarders lease and even operate aircraft when the need arises.[49] Most forwarders, however, focus on ground-to-ground transportation and therefore do not deal with aero-political issues such as bilateral traffic rights.

Although freight forwarders are not the primary focus of this research, there are two important points that need to be made relative to this interest group. First, the growth of integrated air cargo firms in dealing directly with shippers and consignees often eats into market space traditionally occupied by freight forwarders. There is therefore potential for a clash of interests between these two actors. Second, commercial policies affecting freight forwarders (e.g., customs clearance) affect not only their competitiveness, but the competitiveness of combination and all cargo carriers as well. There is therefore a potential alignment of interests between freight forwarders and non-integrated air carriers.

Other Actors

While there are many other actors with some involvement in the air cargo sector, three deserve mention at this point. The first is national postal services, which, with few exceptions are owned and operated by state governments. While postal services generally do not operate air cargo fleets, they act as *de facto* freight forwarders for air post and parcels carried by air transportation. Postal services often contract with combination or all-cargo carriers for transportation services. Their purchasing clout is impressive. The U.S. Postal Service, for example, shipped nearly 45% of all U.S. domestic air cargo shipments in 1998, making it the largest air shipper in the domestic U.S. market.[50] Postal services and integrators often view each other as competitors, and political disputes between these two groups are not uncommon. The acquisition of TNT by PTT Nederland (partially owned by the Dutch Post Office), and the equity investment in DHL by Deutsche Post in 1998 (increased to 51% in 2000) brought postal authorities into even greater competition with UPS and FedEx, the remaining independent integrators. In late 2000 and early 2001, slightly after the study period, FedEx responded by sealing alliances with the French and U.S. postal authorities.[51]

A second group of actors that deserve mention here are airport authorities. The rapid growth of cargo and passenger business, coupled with a greater commercial focus among airport authorities, has made this interest group increasingly active in the creation of air cargo commercial policy. Examples include large, semi-autonomous government organizations such as Aéroports de Paris and The Port Authority of New York, to publicly traded firms like BAA, which operates three London airports and claims to be the world's largest airport company.[52] It is not uncommon for airport authorities to actively market their facilities directly to air cargo firms in hopes of attracting more traffic and/or developing ground infrastructure. Airport authorities have also increased their profile as political actors, and in some cases lobby national government officials to influence air cargo policies.[53] One of the benefits that they promote is economic development. Dallas Fort-Worth Airport, for example, adds more that $11 billion annually to the local economy, a rate of over $1 million per hour.[54]

Finally, there is a group of service providers that focus on customs brokerage services. Their role is to handle paperwork and move imports and exports through customs clearance.

Because provision of this service requires expertise for a particular country's customs procedures (and often domestic ownership), customs brokers are small and fragmented group of suppliers. Other air cargo actors, including freight forwarders and integrators, also provide customs brokerage services.

Air Cargo Market Segmentation

There are a number of ways to segment the air cargo market, but perhaps the most critical distinction for firms and governments alike is the distinction between "freight" and "express" service. The former is the traditional air cargo market, the domain of all-cargo carriers, combination carriers, and freight forwarders; the latter, the domain of the fast-growing integrators.

Freight Segment

The provision of "non-integrated" air cargo service, which will be referred to as "freight," typically involves receipt of the shipper's cargo by a freight forwarder, who contracts with a combination carrier or all-cargo carrier to transport the goods to a destination airport.[55] At the destination airport, the freight forwarder takes receipt of the goods from the air carrier for delivery to the consignee (figure 2.4). There may also be a separate customs broker involved in one or both ends of this transaction. With numerous actors involved, there is the necessity for numerous transfers of information and documentation along the transaction chain, which adds to the delivery time. There is also an issue concerning guaranteed or "positive space" if a combination carrier is involved, as many combination carriers prioritize passenger baggage before cargo or require higher pricing to guarantee space. Combination carriers also develop their schedules around passenger transportation demand, which is often at odds with air cargo customer requirements.[56] As a result, the average delivery time for non-integrated air cargo is six days.[57] Furthermore, there is variability in the delivery time, as most services are not "time-definite." Despite these drawbacks, non-integrated "freight" service has some important advantages. For one, it is the least expensive air cargo alternative. Actors in this transaction chain may also have more flexibility to tailor service offerings to the needs of the customers (e.g., specific pick-up time) than integrators, who are focused on maintaining a fixed schedule to optimize their networks. This market segment therefore attracts price-sensitive customers who are willing to trade off cost for timely, time-definite delivery. Not surprisingly, government postal authorities send the lions' share of airmail via this service.

Figure 2.7: Air Cargo Market Segmentation

Segment	Supplier Control	Delivery Time	Est.Market Share	Growth Rate	Key Suppliers
Express	•"Door-to-door" •Ground networks integrated with flight operations	24 - 48 hours	20% in FTKs 50% in $USD	Intl. FTKs growing 18% per year through 2015	Integrators •FedEx •UPS •DHL •TNT
Freight	•"Airport-to-airport" •Supplier relies on third-party suppliers to/from airport and for customs clearance	6 days (typical)	80% in FTKs 50% in $USD	Intl. FTKs growing 4% per year through 2015	Combination Carriers All-Cargo Carriers

Sources: Boeing (1998), The International Air Cargo Association (1998), analysis

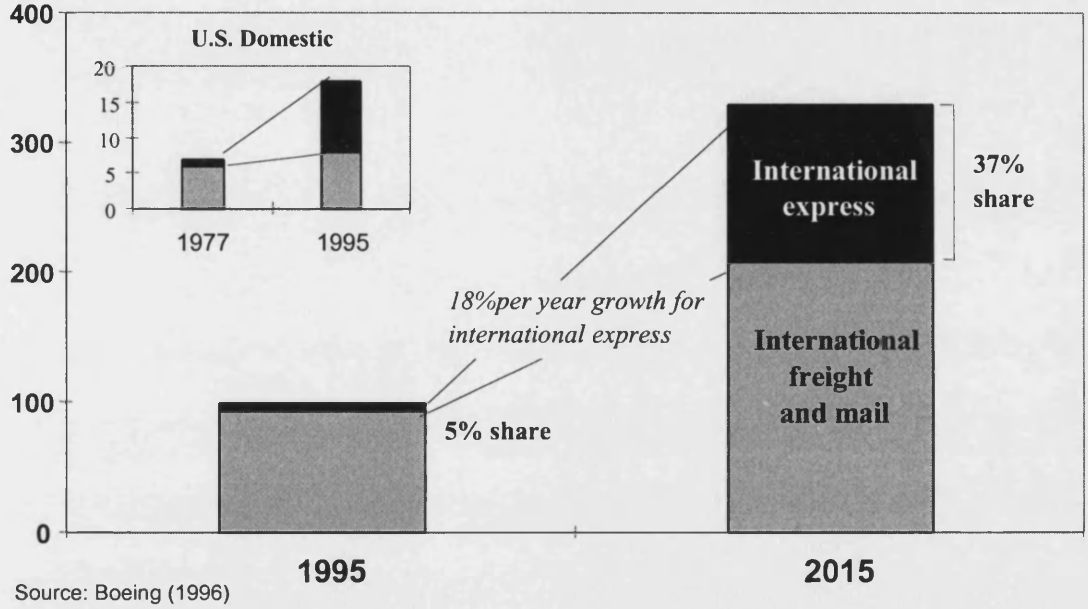
Note: "FTK" = freight-ton-kilometer, a common measure of air cargo volume

Express Segment

Express air cargo service is provided primarily by integrators, which guarantee time-definite delivery within 24-48 hours anywhere in the world. This level of service demands large investments in aircraft, ground vehicles, personnel, and warehouses. UPS, for example, employs 326,000 people who operate a fleet of 224 aircraft and 157,000 vehicles in more the 200 countries worldwide.[58] Information technology capabilities are also significant to efficiently operate such a vast multi-mode network, guarantee on-time delivery, and provide customers with real-time shipment information. As a result of these investment levels, entry barriers into the integrated market segment are significant and the supply base is extremely concentrated with four major suppliers. These entry barriers allow express carriers to capture much higher yields (prices) than for non-integrated service. For example, rates may easily attain $20-25 per kilogram for a transatlantic shipment, in contrast to $5-6 per kilogram for non-integrated service.[59] As a result, the air cargo express segment, when measured by dollars rather than freight ton kilometers, represents approximately 50% of the global air cargo market.[60]

A significant pattern of growth is emerging in the international express market, mirroring the success in the United States domestic market over the past 20 years (figure 2.8). Beginning with a 4% share of the domestic U.S. market in 1977, express today claims 60% of the U.S. market and has averaged 25% growth per year.[61] The demand for express services is following a similar pattern with a 20-year lag. Boeing forecasts the international express to increase at an 18% annual rate, expanding its share of international air cargo from 5% in 1995 to 37% in 2015. Factoring in the much higher prices for express cargo, it becomes clear that express will dominate the international air cargo market in the decade ahead.

Figure 2.8: International Air Cargo Forecast: Express Share of Market Demand
(Billions of Revenue Ton Kilometers)



Source: Boeing (1996)

Given these circumstances, suppliers to the freight segment faced a difficult choice in the late 1990's: make significant investments to deliver express service, or remain in the slow-growth and highly competitive freight segment. A few combination carriers made tentative steps to establish some express capability in the late 1990s, including Lufthansa, and KLM.[62] Integrators, in contrast, have focused on expanding and optimizing their global networks, offering more value-added services such as warehousing and logistics management, and developing competitive advantage through investments in information technology and electronic commerce capability.

The Macro-Economic Influence Of Air Cargo Service

While the previous section focused on the efforts of air cargo TNCs to achieve *competitive* advantage, this section will focus on the macro-economic impact of air cargo service, including its impact on productivity, trade, tax revenue, foreign direct investment

(FDI), and employment. The externalities of air cargo service, particularly its impact on the environment, will also be outlined. The information in this section is in the form of a brief overview; it is not comprehensive or highly analytical. The purpose is to give the reader a bird's eye view of how air cargo fits into the global economic context.

Air Cargo's Influence On Productivity And The Move To Post-Fordist Production

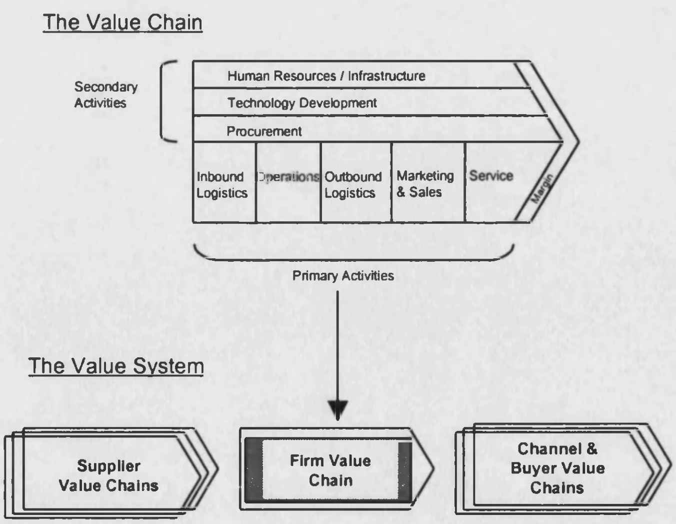
As an infrastructure industry, the key macroeconomic influence of air cargo is not its size – it is $200 billion in its broadest measure (door-to-door). What is most important is its influence on productivity, and ultimately, its role as a trade and investment facilitator. The widespread shift to "post-Fordist" production techniques has, perhaps more than any other factor, increased the importance of air cargo in the world economy.

The supply chains of many industries were influenced by mass-production techniques pioneered by Henry Ford in the 1920's, which emphasized scale, standardization, and vertical integration to increase automobile production productivity. The epitome of "Fordist" production was the River Rouge (Michigan) production facility, which was co-located with a port and steel foundry. Most value-added activities were confined to a single facility to improve coordination and reduce the transportation costs of intermediate goods.

A direct challenge to this production model emerged in the 1950's and 1960's from the Toyota Motor Company in Japan. In place of standard products with long production runs by self-reliant vertically integrated firm, Toyota emphasized rapid product innovation, flexible production, and just-in-time inventory systems. Rather than vertical integration, Toyota emphasized strong relations with suppliers clustered near final assembly facilities. The Toyota model continued to evolve with falling transportation and communications costs in the 1970's and 1980's and soon it became feasible to coordinate large, extended supply chains on a global basis.[63] This production model, which some scholars have dubbed "post-Fordist," facilitated ever-greater movement of intermediate goods and components across national borders.[64]

The growing use of information technology in 1990's brought further innovation to the post-Fordist model. The introduction of "enterprise resource planning" software improved intra-firm coordination between frequently disparate functions as conceptualized in Porter's Value Chain (Figure 2.9). This had a significant impact on operations and logistics functions. Historically, the operations function demanded high inventory levels to ensure smooth production and avoid costly production shutdowns. At the same time, the inbound logistics function was focused on minimizing transportation costs. The result was excessive inventory levels that were replenished periodically in large batches by slow, inexpensive transportation

Figure 2.9: Porter's Value Chain and Value System



Source: Porter (1985)

alternatives. Enterprise resource planning broke down information barriers between "functional silos" to shed light on the relationship between transportation costs, inventory levels, and operations.

The growing use of the Internet and electronic data interchange in the second half of the 1990's allowed inter-firm information sharing, extending the benefits of enterprise resource planning to the entire supply chain. One of the early pioneers of this model was Dell Computer, which produced custom-made computers "just in time" for orders received via telephone or the Internet. Dell shared production requirement information electronically with its suppliers for immediate delivery to Dell's production facilities, where the computer was assembled and shipped directly to the customer within a week. The productivity advantages of this production model were profound. Dell was able to operate with half the number of employees and one-tenth of inventory of its traditional computer competitors. Return on invested capital reached 195% in 1999 compared to 10-20% for traditional manufacturing firms.[65] Soon, companies from around the world were flocking to Austin, Texas to understand the Dell production model, much as firms had flocked to Tokyo and River Rouge earlier in the century. The opportunity for productivity improvement was enormous; in the U.S. alone, the cost of goods in inventory was nearly $1 trillion in 1997.[66] A the close of the decade, major TNCs in a variety of industries announced they were moving to electronic supply chain management systems similar to Dell Computer.[67] This phenomenon was part of what became known as the "New Economy."

The upshot of the move to "post-Fordist" production models is that air cargo became an increasingly desirable transportation alternative, particularly for goods – like computers and electronic components – with high value-to-weight ratios. Information technology empowered company managers with the required information to justify high expenditures of air cargo on the basis of overall supply chain cost savings. A 1993 study of U.S. exports found that 52% of all goods (by value) greater than $16/kilogram were shipped by air, in contrast to 0.06% of goods less than $2/kg.[68] The estimated savings from inventory reductions made possible by improvements in transportation and logistics for U.S. firms were $21.3 billion in 1997, and totaled $107.2 billion for the 1986-1997 timeframe.[69] Overall inventory efficiency for U.S. firms improved by 10% in the 1990s.[70]

Hewlett Packard, a U.S. computer/information technology TNC, illustrates the phenomenon. In 2000, the company spent $1.2 billion on freight transportation, including $720 million on air cargo services. Hewlett Packard's supply chains were global and tightly integrated. A single product required an average of 300 border crossings by components and subassemblies. The cost of adding or subtracting a single day from supply chain turnover was $22 million.[71]

There is another critical consequence of the move to post-Fordist production models: they facilitated what Jagdish Bhagwati (1997) has referred to as the "splintering" of goods and services.[72] Returning to Porter's Value Chain, the inbound and outbound logistics functions gained visibility as functions distinct from operations. Thus these two functions, categorized as "services" by international economists, began to be contracted with outside suppliers and separated from the "goods" of factory operations. Integrators, with their extensive ground logistics network and time-definite service, were the chief beneficiaries of this trend among air cargo firms.

Influence On Merchandise Trade

While the influence of post-Fordist production models and air cargo service on high-technology sectors like computers is impressive, what is the perspective against the broader picture of international trade for all sectors? An analysis of 1997 world merchandise exports is shown in Figure 2.10.

Figure 2.10: Use of Air Cargo for Merchandise Exports

Merchandise Exports Sector	Share World Merchandise Exports 1990	Share World Merchandise Exports 1999	Merchandise Export Value 1999 ($B US)	Use of Air Cargo*
Transportation Equipment, Machinery, & Parts	17.6	17.5	976	Heavy
Computers, Office and Communications equipment, & Parts	8.8	14.1	769	Heavy
Chemicals	8.7	9.6	526	Moderate
Other semi-manufactures	7.8	7.6	414	Moderate
Clothing	3.2	3.4	186	Moderate
Textiles	3.1	2.7	148	Light
Automotive Products	9.4	10.0	549	Light
Mining Products	14.3	10.2	556	Light
Agricultural Products	12.2	9.9	544	Light
Iron and Steel Manufactures	3.1	2.3	126	Light
Other consumer goods	8.8	9.0	492	Light
Miscellaneous	2.9	3.7	187	N/A
All Products	**100**	**100**	**5,473**	

sources: World Trade Organization (2000), U.S. Census Data, analysis

* Use of air cargo based on analysis of U.S. Census data. Heavy = >50%; Moderate = 20 - 50%; Light = <20% (based on value of exports)

The merchandise export sectors that are the heaviest users of air cargo are "transportation, equipment, machinery," and "computers, office and communications equipment." It is estimated that more than 50% of the trade in these two sectors, which represented more than 30% of merchandise exports in 1999 (>$1.7 trillion), moved by air cargo in 1999.[73] It is also significant to note that a growing importance of the latter sector, which increased its share of exports from 8.8 to 14.1% over the 1990 – 1999 timeframe. Air cargo enjoys high penetration in these sectors as a result of value to weight ratios and early adoption of "post-Fordist" production systems.

Sectors that are moderate users of air cargo – defined here as 20%-50% penetration – are chemicals, clothing, and "other semi-manufactures." These three sectors produced more than $1.1 trillion, or 21% of merchandise exports in 1999 – a share that was nearly identical to the 1990 figure. The value-to-weight ratio of chemicals (particularly specialty chemicals) facilitates air cargo transportation as do the seasonality an short product cycles of clothing. The final sector, "other manufactures," includes subassemblies and components.

Six merchandise trade sectors are relatively light (<20% by value) users of air cargo: textiles, automotive, mining, agriculture, iron and steel manufactures, and "other consumer goods." Products produced in the textiles, mining and iron, and steel industries are typically low value-to-weight products that are often inputs to other sectors. A large percentage of automotive exports are finished vehicles or subassemblies, although parts and components often move by air cargo. Finally most agricultural exports have relatively low value-to-weight ratios that favor maritime or ground transportation. One exception is the market for perishable, limited shelf-life agricultural products. For example, the late 1990's witnessed a growing market for fresh flowers from South America (primarily Columbia) to the U.S., an example of air cargo creating a new market opportunity that simply is not possible by other transportation modes.[74]

In summary, the role of air cargo is most pervasive in sectors that can be classified as high value or "high technology" that make up the fastest growing categories of world merchandise exports. The total value of goods shipped by air reached $1.98 trillion in 1997, which equated to 37% of global merchandise trade.[75]

Influence On Trade Of Services

The World Trade Organization (WTO) estimates that trade in services reached $1.35 trillion in 1999, although this figure underestimates trade in many sectors including transportation.[76] The role of air cargo in the emerging trade of world services is much more difficult to quantify than goods. One reason is that Governments can "meter" the flow of goods through customs agencies; there is no parallel organization when it comes to trade in services. It is also very difficult to measure service trade performed by a supplier with commercial presence in another country (GATS mode 3) and by the presence of natural persons in another country (GATS mode 4). In the analysis that follows, therefore, the use of air cargo will have to rely more on inference than the hard data used for merchandise exports. The WTO segregates service trade into three major groups: transportation, travel, and other commercial services (figure 2.11).

Figure 2.11: International Service Trade, 1990 - 1999

Service Exports Sector	Share World Service Exports 1990	Share World Service Exports 1999	Service Export Value 1999 ($B US)
Transportation* (air, sea, other)	28.5	23.0	310
Travel	33.8	32.8	440
Other Commercial Services	37.7	44.2	600
All Services	**100**	**100**	**1,350**

* includes air cargo services

sources: World Trade Organization (2000),

note: "Other" commercial services includes communication, construction, insurance, financial, computer/information, and other.

Air cargo resides in the transportation sector, which includes all transportation services (air, land, sea, space, and pipeline) that are performed by residents of one economy for those of another. This sector produced $310 billion in international services trade in 1999 – a figure the WTO admits is significantly underreported. With this caveat, it appears that air cargo is a significant contributor to this category of service exports, with approximately 60% - 70% of the air cargo market focused on international movement of goods.[77]

The travel service export sector includes all goods and services acquired by travelers, including lodging, food and beverages, souvenirs, entertainment, health, and education. While air cargo undoubtedly plays a role in the provision of all these services, the travel service sector overall appears to have a low dependence on air cargo for service exports.

Finally, the "other commercial services" category includes communication, construction, insurance, financial, computer/information, royalties/license fees, and other business services such as accounting, advertising, and management consulting. Of these service groups, insurance, financial, and business services – approximately 60% of service exports -- stand out as significant users of air cargo, primarily express services for envelopes and overnight parcels.[78] The financial services industry, for example, depends on air cargo for overnight transport of time-sensitive documents and cancelled checks.[79] This can be especially critical for international transactions where standard mail service can takes days or even weeks. Overall, the "other commercial services sector" appears to have moderate dependence on air cargo for service exports.

Impact On Tax Revenue

Air cargo firms are subject to a number of taxes, which are levied primarily by national governments. These include income and pension taxes, unemployment taxes, fuel taxes, and landing fees. Some states also impose a cargo waybill tax for domestic shipments. While there are no figures available for worldwide tax receipts generated by air cargo firms, available data for U.S. air cargo is illustrative. A 1997 study completed for the Cargo Airline

Association indicates that U.S. air cargo firms paid more than $1.3 billion in taxes, including $74 million in fuel taxes, $771 million in income taxes, $140 million in landing fees, and $331 million for the domestic cargo waybill tax.[80] These figures exclude tax revenues generated by combination carriers and freight forwarders.

Impact On Foreign Direct Investment

The foreign direct investment (FDI) generated by air cargo firms is closely correlated to in-country development plans and can assume three broad levels. At the first level, an air cargo firm can choose to airport-to-airport service only and rely on in-country freight forwarders to interface with customers and provide ground transportation. FDI in this approach, which is utilized by most combination and all-cargo carriers, is limited to minor ground handling and maintenance capability.

The next level of FDI commitment includes investment in ground infrastructure to provide logistics and ground transport services. The magnitude of this investment can reach tens of millions of dollars. DHL, for example, invested approximately $30 million ($NT 1 billion) into expanded ground operations in Taiwan between 1999 and 2001.[81] Similarly, TNT invested $35 million to establish a major ground logistics and transportation facility in Aachen, Germany.[82]

The third and most significant level of FDI commitment involves establishing an air cargo hub in country. The investment requirements for air hubs, which include sorting facilities, warehouses, information technology, and maintenance capabilities, can be substantial. Fedex, for example, invested $100 million to establish its Asian Hub at Subic Bay, Philippines, and $200m to create a European "superhub" at Paris' Charles de Gaulle airport. Another integrator, TNT, invested $80 million in 1998 to establish its European "superhub" at Liege, Belgium.[83] While these sums are substantial, air cargo hubs generally act as magnets for additional FDI from other TNCs seeking to take advantage of ready infrastructure and superior air cargo service-- including later cut-off times for next day delivery. The FedEx investment in Subic Bay, combined with good infrastructure and freeport status, attracted $1.6 billion of investments by 1997, including high profile TNCs like Acer Computer.[84]

While the investment levels of air cargo TNCs are not as eye-catching or focused as a $1 billion semiconductor fabrication facility, the aggregate levels can be substantial. UPS is planning $1.1 Billion FDI in Europe over the 1997 – 2002 timeframe, while DHL is in the midst of a $500 million expansion in Asia.[85] When combined with the investment multiplication effect of hubs, the net FDI impact of air cargo firms can be very significant, particularly for developing countries like the Philippines.

Impact On Employment

The air cargo industry is estimated to employ four million people worldwide, including air cargo firms, freight forwarders, and support services.[86] The "big four" integrators alone have more than 660,000 employees worldwide.[87] There is also a multiplication effect for indirect employment similar to the FDI phenomenon. Memphis, Tennessee, FedEx's home city and cite of the largest air cargo hub in the world, is being marketed as "America's Distribution Center" and has created more than 40,000 jobs as a result of expansion of manufacturing and distribution companies from 1987 – 1998.[88] On a smaller scale, a recent study of a proposed FedEx expansion in Prestwick, in the heart of Scotland's computer industry, indicated that 7,400 indirect jobs would be created to complement 1,100 direct jobs – a 6.5 to 1 ratio for indirect employment.[89]

Environmental Impact

The most commonly acknowledged externality of air cargo is its environmental impact, which includes noise and gaseous emissions. Surface transportation modes generate more total noise impact on the environment, but aircraft landing and taking-off generate concentrated noise on specific local communities and airport surroundings. European cities have been particularly demanding for noise reduction targets. New jet engine technology has reduced the noise footprint of modern aircraft. Therefore, the total number of people affected by such noise in the U.S. and Europe may have fallen over the past 20 years, from about 20 million to less than 1 million – or about 0.15 percent of the total population.[90]

Technology has also had a positive impact on gaseous emissions. A recent European Commission study found that among transportation alternatives, atmospheric externalities appear to be most serious for road transportation, followed by waterways, trains, and air. In 1998, air transport accounted for about 2.5% of $CO2$ emissions from the burning of fossil fuels.[91]

Air Cargo Commercial Policy Instruments

The notion that service industries, particularly transport industries, deserve special treatment from policy makers is not new. Even Adam Smith supported British ownership of the merchant shipping fleet on the grounds of national security.[92] There are a number of arguments to justify policy makers' intervention in air transportation industries. Clearly, governments believe that they have a vital in regulating transportation safety. There are also economic arguments justifying government intervention that encompass competition policy, industry development, and infrastructure provision. In many cases, intervention is justified on political grounds, such as the need to protect cultural integrity (e.g., the importance of having a national flag carrier) or to ensure national security (e.g., maintaining domestic ownership of air lift capability in the event of war). The U.S., for example, justifies limits FDI in air carriers on the basis of national security concerns.[93] All of these arguments rationalizing government intervention or regulation play a role in air cargo commercial policy. As noted in Chapter One, this research will analyze air cargo commercial policy in three categories: FDI policy, industrial policy, and trade policy. A discussion of policy instruments specific to the air cargo industry and responsible organizations (figure 2.12) follows.

Figure 2.12: Air Cargo Commercial Policy Instruments and Responsible Organizations

Commercial Policy Category	Examples – Air Cargo Industry	Examples - Responsible Government Organizations
FDI policy	Inward FDI in firms or infrastructure/ Outward FDI by domestic firms	Transportation, Commerce, Foreign Affairs
Industrial policy	Competition policy	Justice, Transportation
	Infrastructure development	Transportation, Local Governments/Airport Authorities
	Tax/ Subsidy / state ownership	Transportation, Foreign Affairs, Finance
	Environment, safety, labor regulation	Transportation, Labor, Environment
Trade Policy	Bilateral and Multilateral international air service agreements	Foreign Affairs, Executive, Transportation, National Trade Representative
	Customs operations	Finance, Customs
	Preferential government purchases	Defense, Postal Service

Source: Interviews. Policy categories are based on Dicken (1992).
Note: EU countries are unique in ceding many aspects of Industrial and FDI policy to a supranational authority.

Foreign Direct Investment Policy

It is clear from the previous discussion that FDI is critical for air cargo services, particularly for express services. Jagdish Bhagwati (1991) has argued that trade in services is tantamount to permitting factor flows of capital and/or labor, particularly for services that require user-producer interaction.[94] This is clearly one of the major differences between service trade and merchandise trade. Air route liberalization, for instance, would be of little consequence to one of the "big four" if they were not able to invest in ground transportation and logistics capability.

The General Agreement on Trade In Services provides a useful framework (modes of supply) for considering the impact of FDI on service trade (Figure 2.13). Of the four modes of supply, the third mode -- commercial presence -- is particularly important for the air cargo industry. The reason is that air cargo is generally a door-to-door service requiring extensive in-country ground logistics networks and infrastructure. Thus, significant FDI is often a prerequisite for air cargo services trade.

Figure 2.13: General Agreement On Trade In Services – Modes Of Supply

Mode Of Supply	Definition
Mode 1: Cross Border Trade	The supply of service from the territory of one member into the territory of another member.
Mode 2: Consumption Of Services Abroad	The supply of a service in the territory of one member to the service consumer of any other member.
Mode 3: Commercial Presence	The supply of a service by a service supplier of one member, through commercial presence in the territory of any other member.
Mode 4: Presence Of Natural Persons	The supply of a service by a service suplier of one member, through presence of natural persons of a member in the territory of any other member.

Source: World Trade Organization

Three "commercial presence" restrictions on FDI have particular relevance for air cargo: limitations on air carrier ownership, and restrictions on foreign companies operating domestic flights (cabotage), and restrictions related to ground operations. The first restriction limits foreign ownership for air transportation services for aircraft based or licensed in-country. Similar to Adam Smith's defense of home ownership of the merchant shipping fleet, state governments today restrict foreign ownership based on "national security" or "national interest" rationale. While ownership restrictions vary, most countries seek to prevent majority ownership by foreigners. The U.S., for example, limits foreign ownership to 25% of voting stock; comparable figures in other countries are Japan (33%), Canada (25%), and Switzerland (40%). The European Union specifies that a "community air carrier" must be effectively controlled by member states, implying third country investment cannot exceed 49.9%.[95] These restrictions have a particular impact on combination passenger/cargo carriers. Because these carriers rely on passenger traffic for the majority of their revenue, their ability to operate a global network with routes not originating or ending in their home territory is limited.

The restriction of foreign carriers from operating domestic flights also has a significant impact on the air cargo market. One key reason is that this prevents foreign firms from operating cargo flights in the massive U.S. domestic market, which represents approximately 30% of total air cargo demand.[96] This restriction affords American TNCs such as FedEx and UPS a significant competitive advantage, particularly considering the high penetration of express services in the U.S. market. This was a major point of contention between the U.S. government and European interests throughout the 1990s, which argued that a level playing field in air transportation was impossible without access to the U.S. market.[97]

Finally, the air cargo industry is impacted by restrictions in foreign ownership and in-country operations of ground services, including airport ramp handling, freight forwarding, and logistics. Regulatory frameworks concerning the provision of these services vary. In some countries, ramp handling is an area of monopoly supply by an airport authority or national airline, while other countries allow competitive supply or cargo self-handling by foreign carriers. Many countries also have FDI restrictions for freight forwarding services, which are now addressed in the GATS Postal / Courier Services and Maritime Transport sector commitments. Logistics services, which oftentimes require significant infrastructure development, are also highly affected by foreign ownership restrictions for buildings or land.

Besides restricting foreign firms from investing in country, governments can also impose restrictions on *outward* investment by domestic firms. The U.S., for example, prohibits investment by its TNCs in Cuba and Libya. Some countries may also limit transfer a capital based on prevailing exchange control concerns. Overall, the impact of outward FDI restrictions on air cargo firms appears to be minimal, as most embargoed countries are relatively small markets. Although regulation of FDI varies from country to country, the government agencies involved are typically the ministries of foreign affairs and transportation.[98]

Industry Policy

While national policies concerning trade or FDI are explicitly concerned with international or cross border issues, the third policy area – industry policy – has traditionally been concerned with domestic issues. Governments undertake industry policies to bolster declining industries, stimulate new industries, or preserve "strategic" industries. However, the boundaries between industry policy, and trade policy in particular, are becoming blurred.[99]

One of the most critical forms of industry policy is competition policy. The World Bank defines competition policy as government measures that directly affect the behavior of enterprises and the structure of industry. It usually includes a mixture of policies to promote competition (e.g., deregulation), and antimonopoly or antitrust laws that prevent anticompetitive business practices. While there are different views regarding the objectives of competition law, it is increasingly recognized that the principal objective should be to maintain and encourage competition as a vehicle to promote economic efficiency and maximize consumer welfare.[100] Competition issues that are particularly relevant to air transportation include market share concentration, supplier alliances, domination of infrastructures, distribution channels, and predatory pricing. While air transport regulations have traditionally supplanted competition law in both domestic and international markets (e.g., IATA fare conferences), the recent trend towards liberalization and privatization has led to renewed interest in the application of competition policy to air transportation.[101] Many Asian countries with a history of flag carrier domination used competition policy to support competitive second or third carriers in the 1990's.[102] The trend towards supplier alliances, particularly among combination airlines, has highlighted the trend towards more activist competition policy. One recent example is a proposed British Airways – American Airlines alliance, which was vetoed by the U.S. Department of Justice on the basis of market share concentration for trans-Atlantic routes. Such a tie-up would have created significant multi-continent route network, which would have likely bolstered the cargo competitiveness of both firms.

National governments can stimulate (or limit) air cargo development through tax polices. The various types of taxes have already been discussed. At the extreme, states can choose to subsidize or own air transportation firms, a practice that has a long tradition in many countries. This issue was in the headlines in Europe throughout the 1990's as the European Commission took an activist role in limiting government subsidies to air carriers. Many air cargo TNCs believe that subsidized or state-owned carriers contribute to overcapacity on key international routes.[103]

Industry policy can also take the form of environmental, health/safety, and labor regulation (e.g., restrictions on non-nationals flying aircraft). While these industry policies remain national in character, there have been attempts to harmonize international standards for the first two categories. The International Civil Aviation Organization has played a significant role in establishing safety and environmental standards. However, enforcement remains the responsibility of state and in some cases, local governments. Noise standards have had a significant impact on the operation of air carriers in the 1990s with broad agreement on "Stage III" noise standards forcing a move to quieter, new technology aircraft for operators serving the North American and European markets.[104] In some cases, noise regulations imposed by local governments can be more stringent than national standards. While air carriers generally have an interest slowing the implementation of noise regulations, there are instances of TNCs lobbying for more stringent standards in an effort to restrict foreign competition.[105]

Infrastructure development is another form of industry policy affecting air cargo operations. Airports, sorting facilities, warehouses, and customs clearance facilities are the key infrastructure for the air cargo industry. The need for good infrastructure, unfettered by capacity constraints, is especially critical at air cargo hubs. Hub operations typically require large numbers of aircraft to land; unload, sort and re-load packages; and take off again within a two to four-hour window. Moreover, packages arriving at their final destination must quickly be inspected by customs and transferred to ground transportation for delivery to customers. These requirements mean that excessive queuing—whether packages waiting for customs or aircraft waiting for takeoff or landing slots—is undesirable, particularly for express cargo services.

Airport capacity in some cities is in short supply as a result of rapidly growing demand, especially at certain times of the day (peak hours). Curfews also restrict airport capacity at night. These restrictions are particularly important for air cargo firms, as peak hour congestion constrains the slots for combination passenger/cargo operations, and curfews limit the activities of integrators and all-cargo carriers that operate principally at night. Not surprisingly, capacity constraints and noise regulations have fueled the rising popularity of all-cargo airports. In many cases, former military bases provide the ready infrastructure and rural setting to meet the requirements of air cargo TNCs. One prominent example is a subject of this study: Subic Bay, Philippines – a former U.S. naval base.

Trade Policy

Traditional trade policy focuses on tariff and non-tariff barriers. As previously outlined, many key aspects of trade policy are covered by bilateral air service agreements ("bilaterals") between states, a lasting legacy of the Chicago Conference. The following tariff and non-tariff aspects of air cargo trade can be included in bilaterals:[106]

- Designations: governs the number of airlines that may operate on certain routes
- Capacity: defines frequency of flights or type of aircraft used
- Routes: designates points that may be served between the bilateral partners' countries

- Pricing: defines requirements for setting prices to be charged by designated airlines
- Operational flexibility: affects ability of airlines to change routing
- Ground-handling: Defines conditions for airlines to secure necessary ground services
- Intermodal services: Defines conditions under which airlines can transport cargo once on the ground
- Charters: Determines arrangements under which charter services are to be operated

The scope of these agreements is significant, although not all bilaterals specify all of these factors. It is also significant to note that most bilaterals cover both passenger and cargo transportation, with passenger issues generally taking first priority in most negotiations. Over the study timeframe, however, there was a clear trend towards greater emphasis on cargo issues. This trend culminated in a historic Japan – U.S. bilateral in 1996, which focused exclusively on cargo issues.[107]

Bilateral routes traffic rights are specified in terms of air freedoms, which extend from one (first freedom) to eight (eighth freedom). Bilaterals designated the types of market access granted between two countries. The definitions of air freedoms are shown in figure 2.14. The more frequent rights in bilaterals range from traditional third and fourth freedoms (rights to carry passengers and freight from home country to another country, and back), to fifth freedom rights (rights to carry passengers and freight between two countries by an airline of a third country on route with origin/destination in its home country). The sixth freedoms are only a combination of third and fourth freedom rights negotiated with different countries, while seventh and eight freedoms (cabotage) are almost never granted.[108] "Open skies" bilaterals, discussed earlier in the chapter, generally lift constraints on third and fourth freedom rights between two states. In some cases, they may extend into the fifth and sixth freedom "beyond" rights, a key necessity for hub and spoke air cargo networks.

Figure 2.14: Air Freedom Rights in Bilateral Agreements

FIRST FREEDOM
To overfly one country en-route to another

SECOND FREEDOM
To make a technical stop in another country

THIRD FREEDOM
To carry freight and passengers from the home country to another country

FOURTH FREEDOM
To carry freight and passengers to the home country from another country

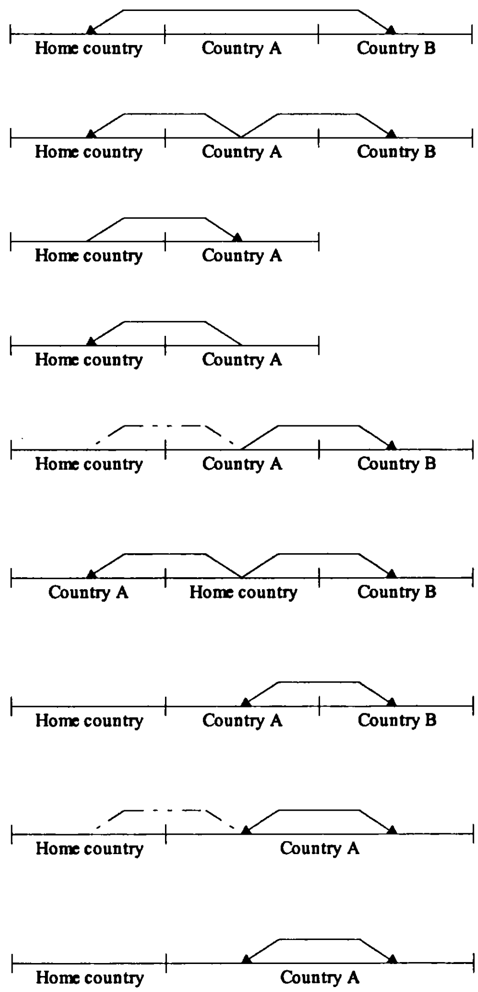
FIFTH FREEDOM
To carry freight and passengers between two countries by an airline of a third country on route with origin / destination in its home country

SIXTH FREEDOM
To carry freight and passengers between two countries by an airline of a third country on two routes connecting in its home country

SEVENTH FREEDOM
To carry freight and passengers betweeen two countries by an airline of a third country on a route with no connection with its home country

EIGHTH FREEDOM OR CABOTAGE
To carry freight and passengers within a country by an airline of another country on a route with origin / destination in its home country

TRUE DOMESTIC
To carry freight and passengers within a foreign country with no connection with the home country



Sources: Association of European Airlines/European Commission/OECD

Air service agreements may include different market access provisions for passenger and cargo operations. India and Australia, for example, have "open skies" cargo policies that differ considerably from passenger transport provisions.[109] While most air cargo service agreements are bilateral in nature (i.e., between two states) there are examples of multilateral air service agreements. One recent example is an open skies between select cities in

Malaysia, Brunei, and the Philippines.[110] The U.S. and European Union held exploratory talks in the early 1990s for a possible open skies agreement, but were unable to reach a meaningful conclusion. They key sticking point, from the U.S. perspective, was the European Commission's lack of authority to negotiate traffic rights on behalf of its members.[111] As a result, the U.S. concluded open skies bilaterals with numerous individual EU countries.

While customs operations have been singled out by the World Trade Organization as a key barrier to trade liberalization, they have a very significant impact on air cargo operations, particularly for express services where minutes and hours count. In many countries, customs operates on a standard 8 a.m. – 6 p.m. schedule, which if often at odds with air cargo carriers that fly primarily at night. For this reason, expanded, responsive customs services were on the agenda of numerous international organizations including the WTO, the World Customs Organization, the Association of Southeast Asian Nations, and the Asia Pacific Economic Cooperation over the study timeframe. The specific policies endorsed by each will be discussed later in this research. Air cargo TNCs also pushed for reform of customs operations. UPS, for example, made the establishment of 24-hour customs a key demand in establishing a hub in Taipei. At the same time, government authorities must balance demand for customs reform with its role in national border security and as an important source of government revenue.

A final aspect of trade policy to highlight is the role of state government purchases, which can affect the demand side of the air cargo market. The earlier U.S. example, with the Postal Service generating 45% of domestic air shipments, is illustrative. Many countries have commercial policies favoring domestic air cargo firms over foreign firms. States can also establish home-preference purchasing policies for military airlift, which can reach significant levels in European and North American countries.

Conclusion

This chapter has shown that air cargo has developed rapidly in recent decades from being a niche business to becoming a major service industry in the global economy. Air cargo today is both a key enabler of international trade and a facilitator of global supply chains, particularly for high technology firms. Moreover, the fastest growing segment of the air cargo market is for time definite "express" service, which is provided primarily by four major air cargo TNCs: DHL, TNT, FedEx, and UPS. All four firms developed global networks spanning more than 200 countries in the 1990s. Despite the global nature of these firms, air cargo remains one of the most heavily regulated industries in the global economy, with national governments possessing a broad portfolio of commercial policy instruments to govern the provision of air cargo service in their territories.

With the industry overview complete, the stage is set to analyze the two subjects of this research, the Philippines and Taiwan. Chapter Three will characterize the political and economic circumstances confronting these two countries, outline the development of air cargo services within each economy, and identify the major changes in air cargo commercial policy over the 1990 – 1999 timeframe.

NOTES

[1] Taneja (1979), p.1.
[2] See Lufthansa Internet home page for a history of cargo operations (http://www.lufthansa.com/english/lh/cmpny/hstry). Site was accessed December 1999.
[3] Taneja (1979), p.1.
[4] Sochor (1991), pp.13-15.
[5] *Ibid.*, pp 15-16.
[6] Taneja (1979), pp.2-4.
[7] *Ibid.*, pp.6-7, 33-38.
[8] KLM Royal Dutch Airlines Internet home page (http://www.klm.com). Accessed December, 1999.
[9] Lufthansa Internet home page (www.lufthansa.com/english/lh/cmpny/hstry). Accessed December, 1999.
[10] Boeing (1994); Taneja (1979), p. 96.
[11] Taneja (1979), pp. 41-44; FedEx Internet home page (http://www.fedex.com)accessed January, 2001. According to industry lore, Smith received a mediocre grade on his Yale term paper that conceived FedEx.
[12] *Ibid.*, pp. 8-9, 14..
[13] Henderson (1998), p. 33.
[14] *Air Cargo World*, May 2000.
[15] World Trade Organization (2000), p. 93.
[16] Yeats, A. (1998).
[17] *Air Cargo World*, May 2000.
[18] Boeing (2000), p.1.
[19] Source: U.S. Department of Transportation Internet site (http://ostpxweb.dot.gov/aviation/IntAv/Agmts.htm). Accessed December, 1999.
[20] Hubner (1999), pp. 86-93. The EU pressured members to cede the right to negotiate bilateral air service agreements to the supranational authority in Brussels; as of early 2001, there was member states retained this right. According to Hubner, the overall impact of internal EU deregulation had a limited effect on industry structure, as the bulk of the cargo market (demand) for European airlines lies outside internal European frontiers.
[21] Based on data from Boeing (2000), pp. 8, 73.
[22] MergeGlobal (1998).
[23] United Parcel Service Internet home page (http://www.ups.com). Accessed November, 1999.
[24] FedEx (1999).
[25] TNT Post Group Internet home page (http://www.tntpost-group.com). Accessed December, 1999.
[26] DHL International is the unit of DHL focusing on international operations. U.S. domestic operations are controlled by a separate DHL entity based in California.
[27] Lufthansa Internet home page (http://www.lufthansa.com/english). Accessed December, 1999. Cargo revenues were 3.8 billion DM in 1998.
[28] The International Air Cargo Association (1998).
[29] Hubner (1999).
[30] For a discussion of this phenomenon see Taneja.(1979)
[31] Hubner (1999), p. 16.
[32] For most combination carriers, air cargo revenues are less than 15% of total revenues. Pricing for air carriers is substantially less than for integrators – pricing for trans-Atlantic routes is typically one quarter of that charged by integrators.
[33] Cargolux Internet home page (http://www.cargolux.com). Accessed November, 1999.
[34] Revenue estimate for air carriers based on analysis of public data and company reports. Assumes 4:1 pricing ratio for integrated vs. non-integrated cargo service
[35] Analysis was completed by Air Cargo Management Group based on 1997 data. Cited in Hubner (1999), p. 19.
[36] Interviews.
[37] *Global Finance*, October 1998.
[38] The name of the DHL parent company is DHL Worldwide Express.
[39] Source: DHL U.S. Internet site (http://www.dhl-usa.com). Accessed November 1999. According to the Colography Group, DHL had a 3% share of the U.S. express market in 1995.
[40] *The Journal of Commerce*, June 8, 1999.

[41] TNT Post Internet home page (http://www.tntpost-group.com). Accessed November, 1999.
[42] United Parcel Service Internet home page (http://www.ups.com). Accessed November, 1999. Note that 302 of these aircraft are leased.
[43] *Global Finance*, October 1998.
[44] *The Wall Street Journal*, 22 January 1997. UPS had only a 3% share of the intra-Asian market in 1996.
[45] FedEx is a subidiary of FedEx corporation, which provides integrated air cargo and logistics services. Throughout the dissertation, the company will be referred to as "FedEx" although in the 1998 – 2000 timeframe, the parent company used the name "FDX Corporation." The name reverted to "FedEx" in 2000.
[46] FedEx Corporation (1998).
[47] Interviews.
[48] *Air Cargo World*, March 2000.
[49] Hubner (1999), p. 18.
[50] Colography Group Press Release, "Postal Service Leader in U.S. Air Market in 1998," 10 August 1997. (http://www.colography.com). Accessed November 1999.
[51] For details about FedEx's alliance with La Post Group (France), see FedEx Corporation Press Release, 12 September 2000; for the U.S. Postal Service Alliance, see 10 January, 2001 FedEx Press Release. (http://www.fedex.com). Accessed January 2001.
[52] The Revenue of the Port Authority of New York and New Jersey had revenue in 1999 of $3.6B; turnover at Aéroports de Paris was FF 8.6 billion in 1999.
[53] Interviews.
[54] Dallas Fort Worth International Airport (1998), p. 6.
[55] "Freight" will be used in lieu of "non-integrated service" throughout the dissertation. Freight is also sometimes used to denote heavy shipments (>70 kg.) however a small portion of these shipments moves via express services.
[56] The greatest density of flights is during the day; cargo often demands flights during the night to accommodate customer needs.
[57] The International Air Cargo Association (1998).
[58] United Parcel Service Internet home page (http://www.ups.com). Accessed November 1999. UPS leases about 300 of these aircraft.
[59] Hubner (1999), p. 22.
[60] Based on analysis of public data and company reports. Assumes 4:1 pricing ratio for integrated vs. freight service.
[61] Boeing (1998), p. 2.
[62] Lufthansa and KLM established "time definite" service for some markets.
[63] For an overview of Toyota's "lean production" approach, see Womack (1990).
[64] For a discussion of "Post-Fordism," see Eden (1993), p. 112.
[65] Michael Dell, Speech to Detroit Economic Club, 1 November 1999.
[66] Colography Group Press Release, *"Colography Group Examines 20 Years of U.S. Air Cargo Deregulation,"* 22 November 1997. (http://www.colography.com). Accessed November, 1999.
[67] A good example is Covisant, an electronic supply chain firm that was established by Ford, General Motors, Daimler Chrysler, Renault, Nissan, and a group of technology partners in 2000.
[68] Boeing (1994), p.66.
[69] Data is from U.S Government (1998), *1997 Economic Report of the President*, Washington, D.C., cited in McFarland (1998), p.25.
[70] One measure of inventory efficiency is expressed in *inventory/sales* ratio. According to C.S. First Boston, this ratio declined from 1.52 in 1990 to 1.35 in 1999. See *The Economist*, 10 February 2001.
[71] *Air Cargo World*, February 2001.
[72] Bhagwati (1997), pp. 437-438.
[73] Estimates for percentage of exports by value moving by air cargo are based on 1997 U.S. Census data.
[74] The transit time of maritime transportation does not support flower "freshness," a key consumer differentiator.
[75] Source is a Colography Group Press Release, "Global Air Cargo, Tonnage, Set Records in 1998," 6 October, 1999. Accessed November 1999. See (http://www.colography.com/press).
[76] World Trade Organization (2000), p. 94.

[77] MergeGlobal (1998) p. 11. No data is available for the percentage of transactions that are performed by residents of one economy for another.
[78] The 60% figure is based on a World Trade Organization estimate for G7 countries. A detailed analysis of service trade can be found in WTO (2000).
[79] McFarland (1998), p. 23.
[80] *Ibid.*, (1998), p.11-13.
[81] *China Post*, 27 August 1999.
[82] *The Journal of Commerce*, 8 June 1999.
[83] *Asia Week*, 19 July 1996, *Reuters News Service*, "FedEx to Launch Paris Hub," 27 September 1999.
[84] *Lloyds List*, "Gordon's Pledge on Sub Bay Rebids," 5 May 1997.
[85] *Financial Times*, 13 June 1997; *The Wall Street Journal*, 22 January 1997.
[86] The International Air Cargo Association (1998).
[87] *Global Finance*, October 1998.
[88] Memphis Chamber of Commerce Internet site. Accessed November 1999. See (http://www.memphischamber.com/economy)
[89] *The Journal of Commerce*, 18 March 1999.
[90] Hubner (1999), pp.38 - 40.
[91] European Commission (1996), cited in *Ibid.*, p. 39.
[92] Smith (1964), pp. 407-408.
[93] The U.S. considers the Civil Reserve Air Fleet (CRAF) a vital element of strategic lift capability in the event of war. As of 1998, 35 U.S. airlines were part of the CRAF. See http://www.af.mil/news/factsheets/Civil_Reserve_Air_Fleet.html.
[94] Bhagwati (1991), pp. 272-273.
[95] Hubner (1999), pp.47-49.
[96] The U.S. market generated 31.9% of world air cargo demand (ton-kilometers) in 1997. See Boeing (1998), p. 11.
[97] One example of a European interest is the British Cargo Airline Alliance, which staged a well-publicized campaign for the U.S. to allow cabotage and wet-leasing – a practice where a domestic operator can lease an aircraft and crew from a foreign firm.
[98] Interviews.
[99] Dicken (1992), pp. 157-158. Also see McGuire, Steven, *"Firms and governments in international trade,"* pp. 147-161, in Hocking and McGuire (ed.) (1999).
[100] Definition is from the World Bank (http://www1.worldbank.org/beext/part_i_cp/cp_page1_faqs.htm). Also see Lipsey, Richard G., *"Globalization and National Government Policies: An Economist's View,"* in Dunning (1997), p. 85. Lipsey argues that competition policy seeks to prevent firms from merging to obtain significant power over their markets or colluding while remaining separate entities to keep prices high by restricting inter-firm competition
[101] Hubner (1999), pp.63-64.
[102] Interviews. Examples include Korea and Taiwan. Also see Findlay *et al* (1997).
[103] Interviews.
[104] European authorities pushed for even quieter "Stage Four" noise regulations, an initiative that was adamantly opposed by the U.S.
[105] A recent example is British Airways' push for more stringent noise limits at London airports, which would harm the operations of Asian air cargo TNCs.
[106] U.S. General Accounting Office (1996), pp. 56-58.
[107] *Ibid.*, pp. 40-41.
[108] Hubner (1999), p. 57.
[109] See *Cargo News Asia*, 21 June 1999, for a discussion of Australia's air cargo policy. For India, see *Cargo News Asia*, May 8, 2000.
[110] Interviews. Only airports in the southern Philippines are in the agreement.
[111] U.S. General Accounting Office (1996), p. 41.

Chapter III: Air Cargo Commercial Policies In The Philippines And Taiwan

The focus of this research now turns to air cargo commercial policy development for the two "core" case studies: the Philippines and Taiwan. The objectives of this chapter are twofold: 1) to outline the political and economic circumstances confronting each country over the 1990 – 1999 timeframe, and 2) to identify commercial policies developed for the air cargo sector over the same timeframe. The Philippines will be analyzed first, followed by Taiwan.

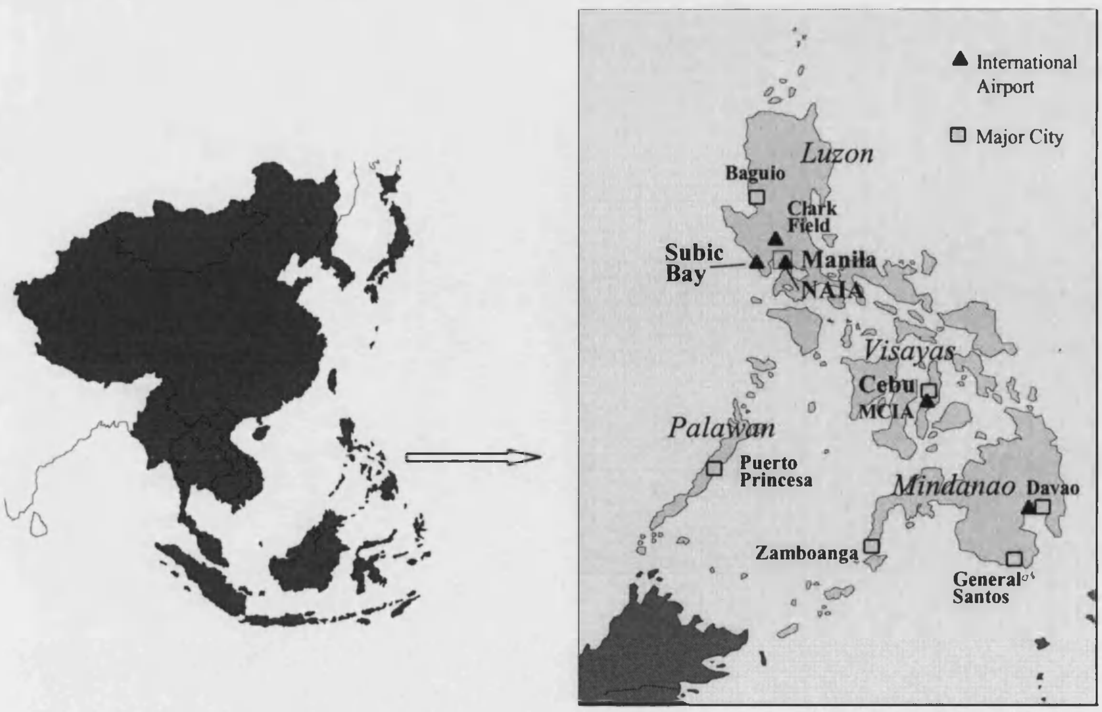
THE PHILIPPINES

Political and Economic Circumstances

Historical Perspective Pre-1990

The 7,000+ island Philippine archipelago is located in Southeastern Asia between the Philippine Sea and the South China Sea, east of Vietnam. The total area of 300,000 square

Figure 3.1: The Philippines



kilometers –slightly larger than the U.S. state of Arizona – is generally divided into four areas: the northern region of Luzon, the central island group of Visayas, the southern region of Mindanao, and to the west, the province of Palawan with more than 1,700 islands. The country stretches for 1,850 kilometers from north to south and 1,100 kilometers from east to west. Major population and economic centers include greater Manila (the capital), Baguio, Cebu, Davao, and General Santos. The terrain is mountainous with narrow to extensive coastal lowlands. The climate is tropical marine with an average of five to six cyclones striking the country per year. The population of the Philippines was 79 million with an average life expectancy of 66 years in 1999. Ethnic groups include Christian Malay (91.5%), Muslim Malay (4%), Chinese (1.5%), and other (3%). The population growth rate averaged more than 2% though the 1990s and stood and 2.05% in 1999. [1]

For nearly four centuries, the Philippines was either a colony of Spain or a commonwealth of the United States. Permanent Spanish occupation of the country, named for King Philip II of Spain, began in 1563 and lasted until the late Nineteenth Century. After the opening of the Suez Canal in 1869, many young Filipinos left their country to study in Spain and brought back with them ideas of political freedom. This influx of ideas contributed to a series of revolts led Dr. Jose Rizal against the Spanish occupiers. Dr. Rizal was executed 1896. In 1898, a dispute over Cuba led to the Spanish-American war. The United States gained control over the Philippines as a result of the conflict. Although native Filipinos fought alongside the Americans against the Spanish, they did not gain their independence. Instead, the United States assumed colonial control for the next 50 years.

American control of the Philippines continued until 1942, when Japanese troops landed on Luzon and conquered Manila. Japanese military rule continued until 1944, when U.S.

forces under the command of General Douglas MacArthur recaptured the country. On 4 July 1946, the Philippines received full independence from the U.S. and Manuel Roxas was named the first president of the Republic of the Philippines (R.P.). Ferdinand Marcos was elected president in 1965 and again in 1969. Citing a breakdown in social order, Marcos declared martial law in 1972 and began to implement his concept of the "New Society" which included partial land reform and a crackdown on crime. Martial law continued until 1981 and Marcos was confirmed as head of state for another six years despite allegations of vote rigging.

In 1983, former senator Benigno Aquino, a severe critic of Marcos, was murdered at Manila International Airport minutes after returning from exile in the U.S. The Aquino assassination, which many believed was ordered by Marcos, mobilized many segments of the population to oppose Marcos' rule. A snap election was called in 1986 and the opposition united under Aquino's widow, Corazon "Cory" Aquino. The election was declared a Marcos victory, although many independent election monitors witnessed widespread fraud and asserted an Aquino victory. Ms. Aquino led a campaign of non-violent civil unrest throughout the country, and the last straw for Marcos came when Defense Minister Juan Ponce Enrile and Armed Forces Vice-Chief of Staff Fidel Ramos joined the Aquino camp together with their military units. After thousands of unarmed civilians barricaded the streets to prevent military action by loyalist soldiers, Marcos fled the country and Ms. Aquino was named president. The episode became known as "The EDSA Revolution," named for the street in Manila where the civil unrest was centered. Among President Aquino's first actions was to annul the constitution and abrogate parliament. Soon, free elections were held and a new constitution was developed for the Republic of the Philippines introducing a U.S.-style tri-cameral government and limiting the president to a single six-year term.[2]

Political And Economic Developments, 1990 - 1999

Although she commanded considerable power at the beginning of her presidency, Aquino did not manage to bring either the military or feudal families that had historically dominated the Philippines under her control. During her period of office from 1986 – 1992, Aquino survived seven coup attempts. She also faced insurgencies by communist guerillas and the Moro National Liberation Front, a group seeking political autonomy for Mindanao. Perhaps the most significant foreign policy issue during her term was the non-renewal of the R.P. - U.S. armed forces agreement in 1992. Despite Aquino's support of U.S. military presence at Clark Air Force Base and Subic Bay in central Luzon, the Senate failed to ratify the treaty and 93 years of U.S. military presence in the Philippines came to an end.[3] U.S. financial aid to the Philippines was reduced considerably following military withdrawal.

Economic conditions deteriorated in the early 1990s after modest growth in the late 1980s. In 1991, GDP growth was less than one percent, while East Asia enjoyed many of the world's most vibrant national economies. Moreover, a population growth rate of 2.8% per annum prevented significant gains in per capita wealth. A land reform program, eagerly awaited by millions of landless Filipinos, never really got off the ground. Meanwhile a nationwide power shortage left Manila, the commercial and political hub of the country, without electricity for up to 12 hours per day.[4] The key economic problems facing the Philippines, including corruption, widespread poverty, poor education, and lack of infrastructure persisted despite the ouster of Marcos.

President Aquino supported her defense minister, General Fidel Ramos, to succeed her in the 1992 presidential election. As a Protestant, he could not count on the support of the influential Catholic Church but nonetheless achieved a narrow victory over a crowded field of candidates. President Ramos came to office with an ambitious set of goals. The main areas of focus included creation of jobs, revitalization of the economy through increased foreign direct investment, reduction of foreign debt, and overhauling a political climate where corrupt civil servants could no longer plunder state funds. Unlike the former president, Ramos had a policy reform framework summed up in four words: *democratization, devolution, deregulation, and privatization.*[5] Ramos moved aggressively to break up existing banking, communications, and transportation cartels. To attract foreign investment and pursue economic development outside Manila, a law was passed (Republic Act 7916) to create special economic zones throughout the country that provided tax holidays, simplified import and export procedures, and vital infrastructure. To spur infrastructure investment, a Build-Operate-and-Transfer Act was passed in 1994 that allowed foreign firms to develop and operate key infrastructure on a long-term contract before turning the infrastructure over to Philippine control. Despite these reforms, foreign ownership of land remained off limits per the Philippine Constitution. Ramos restored confidence in the business community and traveled extensively to promote the message, "the Philippines is back in business." He established a goal to transform the Philippines into a Newly Industrial Economy by the year 2000, under an economic strategy known as "Philippines 2000." Perhaps the most significant economic achievement was the conversion of Subic Bay, the former U.S. Naval Base, into a freeport that attracted over 200 firms including the electronics TNC Acer Computer and air cargo TNC FedEx.[6] In 1996, the annual Asia Pacific Economic Cooperation meeting was held at Subic Bay, signifying the country's economic revitalization.

Ramos moved to diffuse a significant domestic political problem when he lifted the ban on the Communist Party in 1996 in an attempt to end the guerilla war draining resources from the country. In 1996, Ramos succeeded in securing a peace agreement with the Moro National Liberation Front, which granted the rebels considerable autonomy in most provinces on the island of Mindanao. Foreign policy disputes during his term were few -- perhaps the most notable being the ongoing dispute with China and other Southeast Asian countries over the territorial status of the Spratly Islands. Overall, the clear focus of the Ramos administration was domestic economic and institutional reform. Despite a strong record of success, President Ramos was limited to a single six-year term and stepped down in 1998.

Joseph Estrada won a clear victory in the third post-Marcos presidential election held in 1998. Estrada, a former senator and Ramos' vice-president, garnered four times more votes than the nearest competitor. President Estrada was enormously popular with working class Filipinos (he was a former movie actor) and ran on a platform of reform and improving the living standards of the poor. One of his first political initiatives was to upgrade the country's inadequate infrastructure by changing the provision in the Philippine Constitution prohibiting foreign ownership of land and majority ownership of public utilities; he contended that there was not enough Philippine capital to upgrade infrastructure to world-class standards. Estrada's constitutional reform efforts, however, were blocked by widespread protests led by former president Aquino and Cardinal Jaime Sin – the influential leader of the Philippine Catholic Church. President Estrada also placed a strong emphasis on food security, agriculture, and housing. Soon he moved to protect Philippine firms, including Philippine

Airlines (PAL), from foreign competition. Estrada's critics attributed the PAL action as a favor for owner Lucio Tan, the president's personal friend and largest campaign contributor. As the decade closed, foreign investment was harmed by a perception that President Estrada was allowing a return to Marcos-style cronyism and corruption.[7]

Philippine Economic Structure

The economic structure of the Philippines reflects its status as a developing country. In 1990, the composition of the $44 billion GDP was 23% agriculture, 36% industry, and 41% services. Perhaps most significant, external debt stood at $30.6 billion (70% of GDP). After a recession in the early 1990's, annual economic growth accelerated to the 4 - 6% range under President Ramos in the mid-1990's before a region-wide recession in 1998. The Philippine GDP stood at $88.4 billion in 1998. Like many countries, the Philippines experienced a shift to the service sector and by 1998, services made up 46% of the GDP, compared to 35% industry and 19% agriculture. Despite this shift, about 40% of the labor force was engaged in agriculture in 1998, followed by 19% in government/social services, 18% in services, and 10% in manufacturing. Strong population growth over the decade muted gains in per capita GDP, which stood at approximately $1,200 in 1998; 32% of the population remained below the poverty line.[8] Like many developing countries, wealth was strongly concentrated in the capital region, in this case metropolitan Manila, where per capita GDP was two to three times greater than the rest of the country. This disparity drew hundreds of thousands of "squatters," or homeless people to Manila to seek a better life. External debt increased over this timeframe but not as fast as economic growth and debt as a percent of GDP decreased from

70% in 1990 to 60% in 1997.[9] Notably, the Philippine balance of payments was helped by money sent home by more than four million Filipinos employed outside the country.

A review of the largest business enterprises (figure 3.2) illustrates the structure of the Philippine economy in the 1990's. The biggest firms were primarily state-protected utilities or foreign TNCs with local subsidiaries.

Figure 3.2: Largest Philippine Enterprises

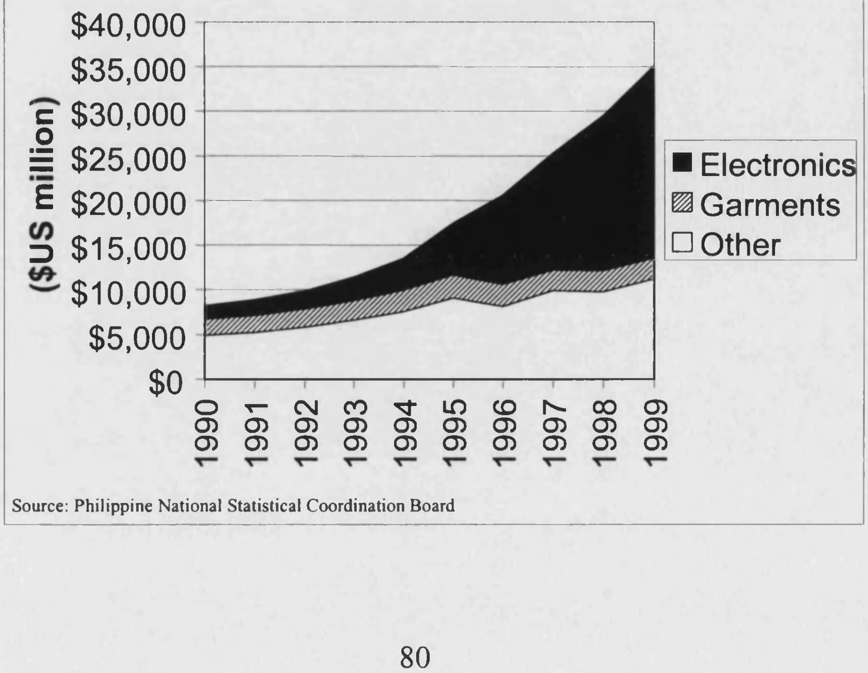
	1994		1999	
Rank	Company	Sales ($M)	Company	Sales ($M)
1	San Miguel Corp. (Beer, food, beverages)	2,590	National Power Corp. (Power generation)	2,118
2	National Power Corp. (Power generation)	1,953	Manila Electric Co. (Electricity distribution)	2,107
3	Petron Corp. (Oil refining, distribution)	1,739	San Miguel Corp. (Beer, food, beverages)	1,912
4	Manila Electric Co. (Electricity distribution)	1,661	Petron Corp. (Oil refining, distribution)	1,442
5	Pilipinas Shell Petro. (Oil refining,distribution)	1,224	Texas Instruments Philippines (semiconductors)	1,391
6	Caltex Philippines (Oil refining, distribution)	1,057	Pilipinas Shell Petro. (Oil refining,distribution)	1,357
7	***Philippine Airlines (Air Transport)***	***1,008***	Phil. Long Dist. Telephone (Telecommunications)	1,151
8	Ayala Corp. (Property, finance)	853	Caltex Philippines (Oil refining, distribution)	940
9	Phil. Long Dist. Telephone (Telecommunications)	842	Ayala Corp. (Property, finance)	884
10	Nestle Philippines (Food)	721	Nestle Philippines (Food)	856
			14: Philippine Airlines (Air Transport)	***460***

Source: Asia Week 24 November 1995 & 19 November 1999.

In 1994, only one of the ten largest firms --San Miguel Corporation -- was a firm of Philippine origin that was competitive outside the home country; the other three firms competing outside the domestic economy were foreign TNCs operating in-country subsidiaries (Nestle, Caltex, and Shell). Other firms in the top ten included four utilities (Manila Electric, National Power, Philippine Long Distance Telephone, and Philippine Airlines), an oil refining firm (Petron) and a property development firm (Ayala). By the end of the decade, one new firm – Texas Instruments Philippines – broke into the top ten while Philippine Airlines dropped to the 14th position. It is also noteworthy that the largest firms that were not public enterprises or TNCs were owned or controlled by families that had long dominated Philippine domestic affairs. Examples include Philippine Long Distance Telephone (Cojuanco family), PAL (Lucio Tan), and Ayala Corporation (Ayala family).

Perhaps the most significant change in the Philippine economy in the 1990s was dramatic growth of exports, which fueled economic growth and erased a chronic trade deficit. In 1990, exports totaled $8.2 billion with garments (22%) as the leading export category. Other significant export categories included electronics (18%) and coconut oil (6%). The incentives created by the Ramos Administration, including the provision duty-free Special Economic Zones (SEZs), attracted investment by major electronics TNCs. U.S. electronics TNC Texas Instruments, for example, expanded microchip production in Baguio and by 1998 generated $1.5 billion in revenues and over 5% of the country's exports.[10] Acer Computer (Taiwan) established a major facility at the Subic Bay Freeport, while American TNCs Motorola and Intel established facilities in SEZ's near Manila. The investment of TNCs was not limited to Luzon; the Mactan Export Processing Zone, located near Cebu, attracted major investments by Asahi Pentax (Japan), NEC (Japan), and Fairchild Semiconductor (U.S.). The impact of these investments on Philippine exports was profound. Exports of electronics and components grew from $1.5 billion in 1990 to $21.6 billion in 1999 (figure 3.3). As a result

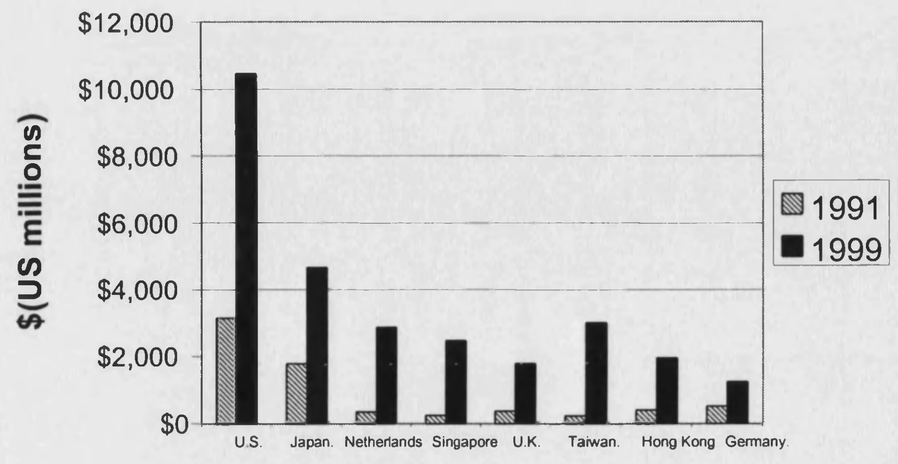
Figure 3.3: Philippine Exports 1990 -1999



Source: Philippine National Statistical Coordination Board of this growth, Philippine exports more than quadrupled in the 1990s to reach $35.0 billion in 1999. Seventy five percent of this growth was attributed to electronics, which by the end of the decade made up 62% of Philippine exports. The second largest category of exports was machinery and transport (11%), followed by other manufactures (10%), and garments (8%).[11]

The largest markets for these exports were the U.S. and Japan. In 1999, the U.S. market accounted for $10.5 billion (30%) of exports while the Japanese market purchased $4.7 billion (13%). The relative importance of the U.S. and Japanese markets, accounting for nearly half of all Philippine exports, was steady throughout the 1990's. The largest change in exports occurred in the "second tier" markets: Singapore, Taiwan, Hong Kong, the United Kingdom, and the Netherlands (figure 3.4). In both Singapore and Taiwan, exports increased more than eightfold (double the overall rate of export growth) to reach $2.5 and $3.0 billion, respectively, in 1999. As the two largest non-Japanese markets in Asia, these two countries accounted for 16% of exports at the close of the decade.

Figure 3.4: Philippine Exports By Country



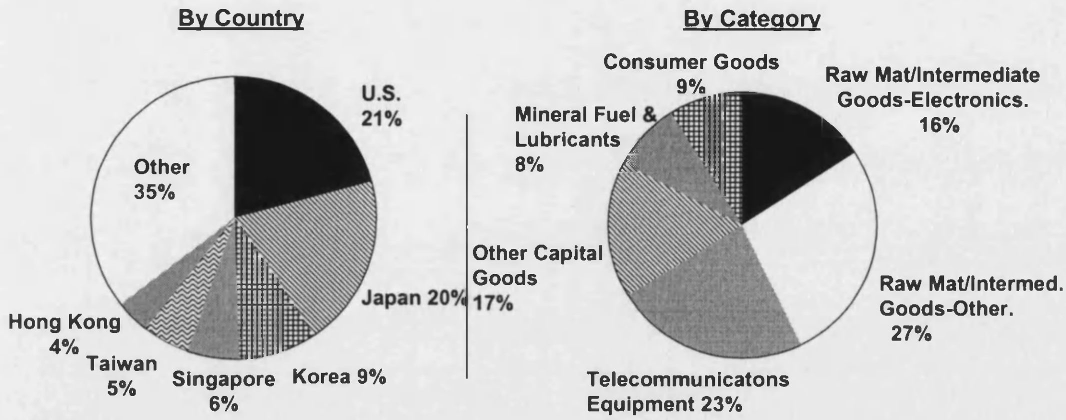
Source: Philippine National Statistical Coordination Board.

The next largest Asian export market was Hong Kong ($1.9 billion). The largest European export markets, The Netherlands and The United Kingdom, increased faster than overall export growth and accounted for 8% and 5% of exports, respectively, in 1999. The next largest European market was Germany, which grew at two-thirds the overall rate of exports growth to reach 1.02 billion in 1999.[12]

The shifting pattern of exports in the 1990's was closely correlated with the rise of electronics, specifically semiconductors and integrated circuits, in Philippine exports. As intermediate products, they were shipped to countries with significant assembly operations for computers, office equipment, and telecommunications equipment – the next stage of the high technology supply chain. Thus countries with relatively small economies but significant production activity in these sectors increased in importance, including The Netherlands (home to Philips N.V.), Taiwan (home to Acer Computer), as well as Hong Kong and Singapore (home to many high technology final assembly operations in Asia). At the same time, countries with less production activity in these sectors (e.g., Germany) declined in relative importance.

The pattern of Philippine imports presents a somewhat different picture than exports. First, imports grew at a slower overall pace in the 1990's than exports; while exports quadrupled over the decade, Philippine imports – slowed somewhat by a mild recession in 1998 -- increased by 250%. Thus a trade deficit that stood at $4 billion in 1990 was reversed into a $4 billion trade surplus by 1999. Of the $30.7 billion in 1999 imports, electronics raw materials and intermediate goods made up 16% of total exports, while non-electronic raw materials and intermediate goods accounted for 27%. Telecommunications and electrical machinery was the largest category of capital goods with 23% of Philippine imports; other capital goods accounted for 17%. The final two groups of imports were consumer goods (9%) and fuels and lubricants (8%).

Figure 3.5: 1999 Philippine Imports
Total: $30.7 B



Sources: Philippine National Statistics Office, National Statistical Control Board

The largest sources of Philippine imports in 1999 were the U.S. (21%) and Japan (20%), followed by Korea (9%), Singapore (6%) and Taiwan (5%). The fastest growing major import markets in the 1990s were Korea, China, and Singapore, while imports from Saudi Arabia (predominantly crude oil) decreased in proportion to the total.[13]

Overall, it is clear that the patterns of Philippine trade changed significantly in the 1990s as a result of the FDI by electronics TNCs and subsequent boom in exports of electronics and components. As burgeoning producers of semiconductors and integrated circuits (intermediate goods), Philippine-based firms increasingly exported to countries at the next stage of the electronics supply chain. The primary customers were not consumers, but electronics giants like NEC, Philips N.V., Acer, and Dell Computer. The pattern of imports also shifted as well with inputs for electronics production emerging as a major category for imports. The Philippines, which began the decade with garments as the leading export category, ended the decade with the value of electronic exports exceeding garments by a factor of seven-to-one. The $21.6 billion in 1999 electronics exports, in a developing economy with a GDP of less than $100 billion, was a significant stimulus to economic activity and positive contributor to the balance of trade. Indeed, the broader global trend of rapidly increasing high technology exports described in Chapter Two was magnified in the Philippines.

Air Cargo Sector Development and Commercial Policies

Given these political and economic circumstances, which air cargo policies were implemented by the Philippines? This section will outline the circumstances in the Philippine air cargo sector at the beginning of the study period and describe major air cargo commercial policy changes over the 1990 – 1999 timeframe.

1990 Air Cargo Sector Circumstances

The Philippine air cargo market size at the dawn of the 1990s reflected the relatively low levels of international trade, protectionist economic policies, and lack of domestic infrastructure development. In 1990, the air cargo market size was less than 700 million ton-kilometers with total air cargo revenues of less than $200 million.[14] Twenty-six percent ($2.0 billion) of all exports and 20% ($2.4 billion) of imports were transported by air cargo in 1990.[15] Maritime dominated transportation for international trade.

Philippine Airlines (PAL) was the only domestic air cargo supplier in 1990. In 1974, then-president Marcos granted, by decree, PAL monopoly status. The carrier had been state-owned since 1977. Existing international air service agreements (ASAs) gave PAL the right to fly to 34 countries, although few of these agreements included specific cargo service provisions and PAL did not fly to all of the authorized destinations. Foreign air carriers serving the Philippines also provided air cargo service. The carriers with the most significant market presence included European carriers British Airways, KLM, and Lufthansa; U.S. carriers Northwest, United Airlines, and Flying Tiger; and Asian carriers Singapore Airlines, Cathay Pacific, and Japan Airlines. Integrated air cargo service in the modern sense did not exist in the Philippines in 1990, although DHL provided an express courier service through a dedicated ground infrastructure and the belly holds of airlines flying international routes. There was a general recognition by some business interests and academics that the Philippines could be an ideal location for an Asia-Pacific air cargo hub, given its location in the center of the North-South Asia economic corridor stretching from Singapore to Korea. However the resources did not exist for the Philippines to leverage this locational advantage.[16]

The aviation infrastructure in the Philippines was underdeveloped and undercapitalized in 1990. Despite the size and geographic dispersion of the Philippine archipelago (figure 3.1), effectively one major airport, Ninoy Aquino International Airport (NAIA) in Manila, served as the air cargo international gateway with 95% of all shipments. Mactan International airport, adjacent to Cebu, carried the remaining 5% of international shipments.[17] Some the best aviation infrastructure in the country was used by the U.S. military, at Clark Air Force Base and Subic Bay Naval Station in central Luzon. The U.S. constructed both during the Cold War, with Clark the largest American air base outside the U.S. Philippine infrastructure also included many secondary airports such as Davao and Zamboanga, which connected these cities with Manila via exclusive service by Philippine Airlines. Philippine customs administration to support air cargo services was slow, inept, and notoriously corrupt. Cargo clearance times of two or three days were not uncommon. Faster clearance often required personal connections, bribes, or both.[18]

Despite the shortage of capital for infrastructure, provisions of the 1986 "EDSA" Constitution limited foreign direct investment in aviation infrastructure and air cargo firms. Foreign ownership of Philippine carriers and infrastructure was limited to 40%, per the national constitution. Foreign operation of domestic routes, or cabotage, was illegal. In addition, it was illegal for foreigners to own customs brokerage firms.

Air Cargo Commercial Policies 1990 - 1999

Returning to the commercial policy framework developed in Chapter Two, major air cargo commercial policy changes will be segmented in three categories: trade policy, FDI policy, and industry policy. The intent here is to identify and categorize the major policy changes (figure 3.6); detailed discussion of these policies and the factors that brought them about will be left to subsequent chapters. The analysis will also include potentially significant policies that were either rejected or not enacted. It is important to note that the analysis of air service agreements focuses on those with specific provisions for air cargo rights; agreements that focussed only on passenger rights are not included in the discussion.

Trade Policy

The 1990 – 1992 timeframe, the last two years of the Aquino Administration, was relatively uneventful for air cargo trade policy. The most significant policy event was an air service agreement (ASA) signed with Singapore in 1992 that gave Pacific East Asia Cargo

(PEAC), a new cargo carrier, the right to fly all-cargo flights between the two countries. PEAC was a joint venture between the Philippine Aerospace Development Corporation (80%), a government agency, and integrator TNT (20%). Although technically a violation of the policy designating PAL as the monopoly flag carrier, PEAC was issued a "temporary" operating permit that allowed it to begin operations. The only other ASA's involving air cargo under Aquino were with France (1990) and Brunei (1992). A change in customs policy also occurred under Aquino; PEAC was granted 24-hour customs operations along with its own bonded customs warehouse at Ninoy Aquino International Airport (NAIA) in Manila as long as it was willing to pay overtime wages for customs service. This was the first introduction of 24-hour air cargo customs service in the Philippines, although the service was only provided on request.[19]

The Ramos Administration years (1992 – 1998) were very busy for trade policy reform and liberalization of international air cargo service regulation. Eighteen new or updated ASAs with specific provisions air cargo capacity were signed, including a very liberal agreement with the U.S. that cleared the way for FedEx to establish its Asia air cargo hub at Subic Bay. The U.S. agreement also indirectly cleared the way for another air cargo integrator, DHL, to establish its Asia hub in Manila as a result of rights awarded to U.S. carrier Continental Airlines.[20] Notably, all 18 ASAs negotiated under the Ramos administration increased allowable air cargo capacity and/or frequency, and many designated new carriers (such as PEAC) to provide air cargo service.[21] One exception to the general pattern of liberalization was the rejection of an open skies initiative from Singapore. There were also significant reforms in the Bureau of Customs Administration including the provision of 24-hour customs service and bonded warehouses for any carrier giving advance notice and willing to pay overtime. Thus the service level that was previously granted to PEAC was now available to all carriers, foreign and domestic. Other customs reforms included an automation and process simplification initiative in the 1995-1997 timeframe and a 1996 decision to comply with a World Trade Organization mandate to set customs duties based on declared transaction costs rather than on the often-subjective "historical" costs. The target date for implementation of this WTO agreement was set for 1999.

Air cargo trade policy made a U-turn under the Estrada Administration in 1998. As PAL continued to lose money, government policy shifted to a protectionist mode with the operations of neighboring Asian countries examined for "discrepancies" with existing ASAs. In 1999, the Philippines announced a ban on flights to and from Taiwan, citing violations of 5th freedom passenger and cargo capacity provisions of the 1996 ASA.[22] Flights between the two countries were cancelled for weeks and a compromise was reached months later that halved allowable air transportation capacity between the two countries. The incident led to a full-scale diplomatic row and intermittent cancellations of direct flights between the two countries over the next two years. A review of the ASA with the United Arab Emirates in 1999 also led to capacity reductions. Finally, an "open skies" offer from New Zealand that could have cut travel time to Latin America substantially was rejected.[23] The pattern of progressive cargo capacity liberalization had been reversed.

Foreign Direct Investment Policy

Two significant FDI policies were implemented in the early years of the Ramos Administration. The first was to increase the allowable foreign ownership to 100% for ground handling, logistics, and freight forwarding firms in 1993. The change was a result of

Figure 3.6: Philippine Air Cargo Commercial Policies, 1990 - 1999

Policies not enacted in *italics*

	Trade Policy	FDI Policy	Industry Policy
Aquino Administration			
1990	Philippine-France ASA (+)		Established Mactan-Cebu International Airport Authority
1991			Board of Investment incentives for cargo operators, including a 4-6 year tax holiday
1992	Philippine-Singapore ASA (+)		Subic Bay Freeport and Special Economic Zone created Privatization of Philippine Airlines
Ramos Administration			
1992	Philippine-Brunei ASA (+) Philippine-Taiwan ASA (+) (commercial agreement) 24 hour customs granted for Pacific East Asia Cargo		
1993	Philippine-Hong Kong ASA (+)	Increased allowable foreign ownership of freight forwarding, ground handling, and cargo terminal operators to 100%	
1994	Philippine-Singapore ASA (+) Philippine-Thailand ASA (+) Philippine-Indonesia ASA (+) 24 hour customs available for all carriers (on request)	Build-Operate-and Transfer Act	
1995	Philippine-US ASA (+) Philippine-Korea ASA (+) Philippine-Indonesia-Brunei-Malaysia ASA (+) *"BIMP-EAGA"* Air Customs Automation Initiative	FedEx awarded use of Subic Bay facilities for Asian hub	Executive Order 219 established liberalization objective and institutional framework Major upgrade of Subic Bay airport Privatization of Pacific East Asia Cargo
1996 1997	Philippine-Japan ASA (+) Philippine-Taiwan ASA (+) (commercial agreement) Philippine-U.K. ASA (+) Implements Subic Bay Express Customs Agreement WTO customs valuation agreement (enact by 1999) Philippine-Hong Kong ASA (+) Philippine-Australia ASA (+) Philippine-Canada ASA (+) Philippine-China ASA (+) *Rejected Singapore proposal for "open skies"*	Allowed UPS / Delgado Joint Venture *Rejected Nippon Cargo's bid to establish hub in Philippines*	
1998	Philippine-Indonesia ASA (+) Philippine-Netherlands ASA (+)		Begins Davao International Airport Development Project
Estrada Administration			
1998	*Customs Reform Act not implemented (stalled in Senate)*	*Rejected change in 40% foreign equity limit during Philippine Airline crisis* *Failed to renew CLA (40% Japanese) operating permit; air rights awarded to PAL*	Government announces Philippine Airlines protection as key commercial policy objective *No antitrust action taken when Lucio Tan takes control of Pacific East Asia Cargo; TNT exits JV and ceases Philippine air operations*
1999	Unilaterally abrogates 1996 Philippine-Taiwan ASA; leads to cessation of direct flights (-) Philippine-German ASA (+) Philippine-UAE ASA (-) *Rejects New Zealand "open skies"*		*New International Cargo Terminal at Manila's NAIA abandoned; Clark designated as future cargo airport*

Note: Includes only ASAs with specific cargo provisions; "+" designates liberalization; "-" designates restriction

Sources: Interviews, analysis, Philippine Civil Aeronatautics Board, Board of Investments

GATS commitments made by the Philippines in the Uruguay Round.[24] Notably, this did not change the provision banning foreign ownership of customs brokerage firms. The second FDI policy change was the 1994 Build-Operate-and-Transfer (BOT) Act, also known as Republic Act 7718. While not altering the ban on majority foreign ownership of real estate, the law allowed foreign companies to build and operate infrastructure and public utilities for a predetermined timeframe and profit margin before turning control over domestic operators. The provision also allowed the private sector to make unsolicited proposals to the Philippine government for new infrastructure development. BOT was crucial for attracting foreign investors to solve chronic electrical "brownouts" plaguing Manila in the mid-1990s. In aviation infrastructure, one foreign company – the British firm BAA Pacific Ltd. – made an unsolicited proposal to build a new aviation terminal at NAIA in 1998; the bid was quickly countered by a number of Philippine tycoons and the contract was awarded to a Philippine-led consortium.[25]

President Estrada attempted to go one step further and change a clause in the Philippine Constitution limiting foreign ownership of land and real estate to 40%. Former president Aquino and Cardinal Jaime Sin quickly organized a grassroots movement to block Estrada's initiative fearing a convention to change the Constitution might also lead to a change in the provision limiting the President to one term of office. By the end of 1999, Estrada gave up his effort to change the Constitution.

The Philippines also showed great flexibility from an FDI perspective in attracting air cargo TNCs FedEx and UPS. As discussed in previous chapters, FedEx was given primary use of the air cargo facilities at Subic Bay when it announced its intention to establish its Asian hub there in 1996. Although FedEx did not own the facilities, it did establish a long-term lease that, in essence, locked out other competitors such as DHL and UPS from using Subic's modern airport facilities and establishing proximity to numerous electronics customers at the Subic Bay freeport. Giving sole use of an airport to a foreign TNC was a definite change in policy direction for the Philippines.

In 1996, the Ramos administration allowed UPS to establish a 60% stake in a joint venture with Delgado Brothers (Delbros), a Philippine freight forwarder. The scope of this joint venture covered freight forwarding, customs brokerage, and logistics for the Manila and Cebu metropolitan areas. The 60% foreign stake in the company was an apparent violation of Philippine Constitution, which prohibits any foreign ownership of custom brokerage operations. This legal issue was identified and discussed with government officials (unsuccessfully) by domestic freight forwarding interests in the late 1990s.[26]

Industry Policy

There were three significant industry policy changes under the Aquino administration; two of these changes related to related to aviation infrastructure. First, President Aquino signed R.A. 6958, which created Mactan-Cebu International Airport Authority (MCIAA) as an autonomous organization within the Department of Transportation and Communications. MCIAA was the second airport in the country, along with Ninoy Aquino International Airport in 1983, to gain autonomy in the management of its operations. This was significant in two respects: one, it signaled a willingness that Manila was serious about developing aviation infrastructure outside of central Luzon under the broader banner of devolution; second, it gave MCIAA the autonomy to manage its operating budget, plan infrastructure, and raise capital in public markets. Meanwhile, the surprise decision by the Philippine Senate to not renew the U.S. forces agreement in 1992 led to the withdrawal of U.S. forces from the Subic Naval Base near Manila and the loss of nearly 40,000 jobs. In response, President Aquino signed Republic Act 7227 designating Subic Bay as a freeport and creating the Subic Bay Metropolitan Authority (SBMA) to manage the operation of the massive complex, which included a first-rate airport. SBMA's freeport status allowed goods to enter and leave its facilities without being subject to duties; duties were paid only if goods were introduced to the domestic economy. Like MCIAA, SBMA would have authority over airport operations, but this airport was also in the heart of a special economic zone aimed at attracting TNCs for light manufacturing and service operations. The year 1992 marked another industry policy milestone: the privatization of Philippine Airlines. A consortium led by Antonio Cojuanco (president of Philippine Long Distance Telephone Corporation) won bidding for 67% of shares, while the other one-third remained under government control. Thus after 15 years of government ownership, most of PAL was returned to the private sector.

The Ramos Administration was very active in reshaping industry policy. Perhaps the most significant event was the passage of Executive Order 219 in 1995, which included the following provisions:

- Deregulated the domestic aviation market, including an end to PAL's domestic monopoly and government-set air travel pricing. The door was now open for competitors.
- Opened up competition on international routes by calling for at least two carriers to be designated as official Philippine airlines and redefining the criteria for negotiating

international ASAs by including consumers and end-users in the "national interest," in addition to the traditional focus on air carriers (e.g., Philippine Airlines).

- Established a procedure for negotiating ASAs with the Department of Foreign Affairs as the lead agency, with the Civil Aeronautics Board (CAB) and carriers participating.
- Placed the CAB in charge of frequency and capacity subject to the president's approval.

In a nutshell, Executive Order 219 ended the era of institutionalized PAL domination on both domestic and international levels. Soon, an array of new competitors entered the Philippine aviation market. In the spirit of Executive Order 219, the government sold its 80% stake in Pacific East Asia Cargo, which had been flying under a temporary operations permit since the early 1990's. A consortium of domestic investors, known as Filchart, won the bidding.

Philippine aviation infrastructure got a much-needed boost in 1995, when FedEx filled the vacancy left by the U.S. military withdrawal from Subic Bay. To lure FedEx to the Philippines, SBMA director Richard Gordon secured a $40 million loan from the World Bank for significant airport facilities upgrades required for FedEx operations. Along with NAIA and MCIAA, the Philippines now had a third international gateway and a major tenant focused on making the country the air cargo hub of Asia. In 1998, construction began on a world-class international gateway in Davao. The nearly $100 million effort (funded by Asian Development Bank) was slated for completion in 2003, and included major facility upgrades, a new air cargo terminal, and plans for creating an independent Davao Airport Authority.[27] Finally, Clark Field, the former U.S. Air Force Base in Luzon, began to focus on developing international traffic in the late 1990's to complement an adjacent special economic zone.

President Estrada faced a crisis early in his administration when on midnight of September 23, 1998, PAL ceased operations as a result of mounting financial losses and a failure to reach agreement with a labor union. PAL was Asia's first flag carrier, and was a key supplier of passenger and cargo service for both the domestic and international markets. Estrada personally brokered a union-management agreement and convinced PAL majority owner Lucio Tan to pledge $200 million of his own money for PAL's rescue. With this deal, Tan assumed 90% ownership of the nation's dominant air carrier. Along with this deal came concessions for PAL, including waiving landing fees at NAIA and the requirement that three million Filipinos working overseas use PAL for their flights home.[28] During this crisis, a number of Asian air carriers, including Singapore Airlines, Cathay Pacific, and China Airlines expressed interest in purchasing part or all of PAL, but the government was unwilling to waive the 40% FDI restriction and preferred to keep ownership in domestic hands. The antitrust provision of industry policy came under the spotlight when it was revealed in the late 1990s that the person behind the Filchart consortium – 80% owner of PEAC -- was also Lucio Tan. Despite the fact that one person effectively controlled both Philippine air cargo carriers, no antitrust action was taken.[29] This resulted in TNT (20% owner) pulling out of the joint venture, and in 1999, PEAC ceased air cargo operations.

There were also a few notable infrastructure policy changes under the Estrada Administration. First, construction of a long-awaited $100 million international air cargo terminal at Manila that would have increased capacity by 500% was cancelled in 1999 and plans were announced to move air cargo operations to Clark Field, the former U.S. Air Force Base north of Manila. Like Subic, Clark became a freeport in the mid-1990s and had attracted TNC investment but little air traffic. At the same time, plans were announced to build a light rail system linking Clark with Manila and a highway to link Clark with Subic Bay. The vision was a multi-modal Clark-Subic-Manila economic corridor to revitalize central and northern Luzon and ease the congestion in Manila. The funding for this undertaking, however, was uncertain as were the outlook for the many freight forwarders, logistics firms, and customs brokers that depended on cargo operations at NAIA to sustain their businesses. In late 1999, DHL – one of the big four integrators – announced it was moving the operations of its Asian hub from Manila to Hong Kong. Lack of proper air cargo facilities at NAIA was cited as one of the primary reasons for this decision.[30]

In summary, Philippine air cargo commercial policy changed significantly in the 1990s. A market once dominated by Philippine Airlines and a handful of foreign carriers was opened up to competition and three of the "big four" air cargo integrators (FedEx, DHL, TNT) made Philippines the center of their Asian network for at least part of the decade while the fourth (UPS) entered the market and formed a joint venture to serve the domestic market. A domestic all-cargo carrier (PEAC) was started and began to develop an international network before ceasing operations in 1999. The wave of air cargo liberalization that began with President Ramos in the mid 1990s was effectively reversed by President Estrada in 1998 and 1999. The focus of this chapter now turns to Taiwan.

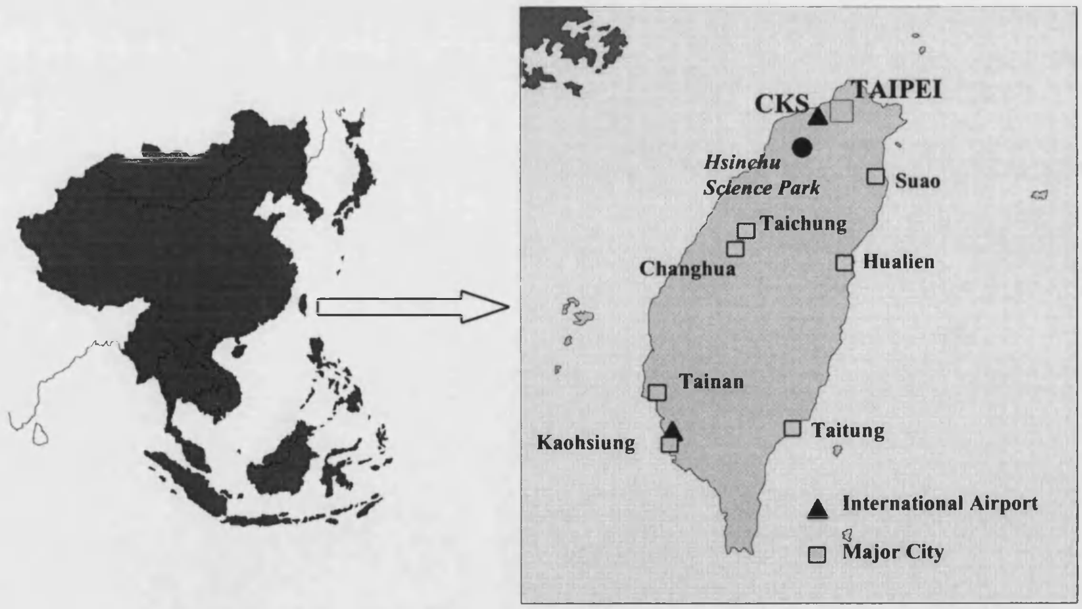
Taiwan

Political And Economic Circumstances

Historical Perspective Pre-1990

Shaped roughly like a leaf, the island of Taiwan is 395 km long and 144 km wide, with a total land area of 32,260 sq. km. It is about the size of the American states of Connecticut and New Hampshire (combined), and a little larger than the Netherlands. Despite the island's small size, is has very tall mountain ranges in the center of the island with some peaks exceeding 3,000 meters. The eastern two-thirds of the island is mostly rugged mountains with flat to gently rolling plains in the west where major population centers are concentrated.

Figure 3.7: Taiwan



No part of the island is more than 50 miles from the sea. Taiwan is the largest body of land between Japan and the Philippines and is 160 kilometers from mainland China. Located between 21 and 25 degrees north latitude, the climate is tropical with three to five typhoons striking the island each year. The capital city Taipei is the political, cultural, and economic hub of the country. Other major population centers include Taichung, Tainan, and the southern city of Kaohsiung – home of Taiwan's largest port and the third busiest in the world.[31]

With a population of 22.1 million people in 1999, Taiwan has the second highest population density in the world (after Bangladesh). Ethnic groups include 84% Taiwanese (including Hakka), 14% mainland Chinese, and 2% aborigine. The population growth rate in 1999 was 0.93%.[32] Aboriginal peoples first inhabited Taiwan about 10,000 years ago and there was no significant Chinese migration until the 15th century. The first Europeans (Portuguese sailors) visited the island in 1517, and the Dutch colonized Taiwan for a brief period in the early 17th century. In 1682, Manchu armies from the Chinese mainland captured the island, and for the next 200 years, there was substantial migration from the Fujian province across the Taiwan Straits. Taiwan remained a county of Fujian province from 1684 until 1887, when it became a province of China.

In 1894, a dispute over Korea led to the Sino-Japanese War. After China was defeated in 1895, Taiwan was ceded to Japan. For the next 50 years, Taiwan remained part of Japan. Although the Japanese maintained tight political control of the island, they contributed substantially to Taiwan's infrastructure and economic development. After the defeat of Japan in World War II, China regained sovereignty over Taiwan. In 1949, Communist forces took control of the Chinese mainland and 1.5 million Chinese, including officials of the ruling Kuomintang (KMT) party, fled to Taiwan. As a result of this exodus, the island's population swelled by 20 percent. The KMT maintained from the beginning that their stay on Taiwan was temporary, that they would retake China soon, and therefore no political opposition could be permitted – a policy that did not endear them to the six million native

Taiwanese. In this spirit, they referred to Taiwan as the Republic of China (ROC). KMT leader Chiang Kai-shek ruled under martial law until 1975, and his son (Chiang Ching-kuo) became president in 1978 after an uncontested election. In 1971, Taiwan lost the "China" United Nations seat to the People's Republic of China (PRC). A further blow came in 1979, when the United States, a key ally, withdrew official recognition in favor of the PRC. By the late 1970s, most countries in the global community had withdrawn official recognition of Taiwan and shifted to unofficial diplomatic links. At the same time, Taiwan's withdrawal from the U.N. meant that they gave up their membership in key international organizations, including two with air cargo ties – the World Customs Organization and the International Civil Aviation Organization.

On the economic front, the KMT enjoyed a great deal of success in restructuring and expanding Taiwan's economy. Encouraged by U.S. aid, a successful land-reform program was carried out in the 1950s along with import substitution to encourage industrial development. The next two decades focused on export-led growth. This period saw a reduction in tariffs to 35% and the establishment of the first export-processing zone in Kaohsiung – a zone with minimum regulations in return for exporting all their production. Export processing zones, combined with relatively low labor costs, attracted many multinational corporations to Taiwan. They also served as a test for what might happen in a more liberalized environment.[33] By the late 1960s, electrical and electronic good industries made important strides as a source of exports but it was not until 1984 that they overtook textiles.[34] The government also improved Taiwan's overtaxed infrastructure and completed major developments in power generation and transportation, including the construction of a new international airport outside of Taipei, Chiang Kai-shek International Airport (CKS).

Taiwan's export promotion strategy led to rising wages, which began to price Taiwan out of labor-intensive industries. Industrial policy therefore shifted to an emphasis on technology-intensive sectors such as semiconductors, electronics, and robotics. By the end of the 1980s, liberalization and internationalization became the new guiding principles for public policy. While some observers, including Robert Wade (1990), labeled the government's intervention in the economy as a "governed market," the results were significant: GNP per capita (1991 prices) increased from NT$24,243 in 1955 to NT$219,637 in 1991 with economic growth averaging more than 9% between 1962 and 1991.[35] Equally as stunning was the transformation of the economy away from a heavy reliance on agriculture. In 1952, the composition of the GDP was 32.2% agriculture, 19.7% industry, and 48.1% services; by 1992 it stood at 3.5% agriculture, 40.1% industry, and 56.4% services.[36] At the same time, Taiwan had consistently low unemployment and a relatively equitable distribution of income. It is for these reasons that Keith Maguire (1998) called the economic development of Taiwan one of the most remarkable transformations in the post-war era.[37]

There were, however, two notable macroeconomic imbalances facing Taiwan in the late 1980s that resulted from its considerable economic success, including escalating excess savings and mounting trade surpluses. In 1986, Taiwan boasted one of the world's largest foreign exchange reserves and the foreign trade surplus reached 19.3% of GDP. These imbalances led to an appreciation of the New Taiwan (NT) Dollar and an erosion of Taiwan's international competitiveness. As a result, the government encouraged more overseas investment, a greater focus on high technology sectors, and movement of labor-intensive industries offshore — particularly to ASEAN countries and mainland China. By

1990, these imbalances had eased somewhat, and the trade surplus was reduced to 5.9% of GDP.[38]

Political change swept through Taiwan at the end of the 1980s. In 1986, the first true opposition party, the Democratic Progressive Party (DPP) formed despite a government ban on new political parties. President Chiang Ching-kuo decided not to interfere and a large number of DPP members were elected in elections held the same year. In 1987, President Chiang ordered an end to 38 years of martial law. In 1988, Chiang died and his designated successor, Vice President Lee Teng-hui, became the first Taiwanese-born President.

Political And Economic Developments 1990 - 1999

President Lee Teng-hui was a modern technocrat and not part of the KMT's old guard. Educated in Japan and the United States, his career consisted of academic and research positions rather than political positions. Lee received his Ph.D. in agricultural economics from Cornell University. His first important act was to solve the problem of the "aging deputies' – KMT legislators who were elected in the mainland before the Communist takeover. Unable to stand for re-election, they were frozen in office for over 40 years, claiming to represent their constituents on the mainland. In 1991, more than 460 were forced to retire and in the following year the first truly free election for the Legislative Yuan was held. This was followed in 1994 by provincial elections and in 1996 by the first direct Presidential election – where Lee was returned to office with 54% of the vote, beating DPP candidate Peng Ming-min by a margin of more than two-to-one. In the National Assembly elections, the KMT also retained a majority. In the late 1990s, Lee moved to eliminate an entire layer of government, the Taiwan provincial government, which overlapped in many cases with the national government.

The process of liberalization opened up debate on a number of issues that had festered under martial law. The towering issue was tied to national identity: was there one China, or two? Taiwanese leadership soon gave up its position that Taiwan would "retake the mainland" and settled on the position that there is only one China – divided between the PRC and ROC – and that some day the Chinese nation would be reunited. While officially claiming to be part of China, the Taiwanese upped the ante in 1994 by lobbying the United Nations to grant a seat to Taiwan. At the same time, President Lee spoke of Taiwan-PRC relations as a "state-to-state relationship" and angered China further by making a high profile visit to the U.S. in late 1995 as a precursor to his re-election campaign. The PRC also feared that Lee's democratic reforms might lead to Taiwanese independence.[39] This led to a series of Chinese missile tests and war games in hopes of intimidating Taiwanese votes to vote for pro-China candidates. The Chinese actions failed to prevent the KMT from returning to office and attracted U.S. aircraft carriers in the Taiwan straits as a show of support for Taiwan. In contrast, economic relations with China thawed in the 1990s as Taiwan gradually lifted restrictions on investment in China. By 1997, at least 30,000 enterprises had moved to southern China and more than 100,000 Taiwan nationals lived there on a permanent basis. Total investment in China by 1997 totaled over $30 billion. Despite the increase in interdependence, direct air and sea links between Taiwan and China were limited to movement through Hong Kong. The growing trade with Hong Kong was bothersome to Taiwan's policy makers who were concerned that dependence on the Chinese markets could lead to greater political vulnerability.[40]

The democratization of Taiwan had the opposite effect on the United States, its other crucial foreign policy relationship. Greater political freedom led to more support from public opinion than in previous decades, partially offsetting the greater interest of U.S. TNCs in the PRC's huge market potential. In Japan, greater economic interdependence with the PRC led to greater influence of Beijing on Japan's relationship with Taiwan. The European Union's outlook on Taiwan was concerned primarily with issues of trade and also how relations with Taiwan influenced relations with the PRC.[41] With the PRC vigorously opposing Taiwan's attempts to have official relations with other states, only 29 countries (concentrated in the Caribbean, Central America and in the mini-states of the South Pacific) maintained official diplomatic relations as of 1997.[42]

Taiwan's growing sense of diplomatic isolation led to a policy known as *flexible diplomacy*. The substance of this policy was to pursue the normal goals of international relations but in an environment where it did not have official representation in much of the world.[43] Although Taiwan was no longer part of the United Nations and was engaged in bilateral negotiations to join GATT, it succeeded in joining the Asia-Pacific Economic Cooperation (APEC) in 1991 under the name "Chinese Taipei." Taiwan's attention then shifted to accession to the World Trade Organization (WTO). Its bid to join the WTO, however, was held up pending the admittance of the PRC. Many observers felt that the WTO wanted to admit Taiwan into its ranks at roughly the same time or shortly after PRC accession.[44]

While Taiwan struggled to expand diplomatic links, a major economic initiative was launched in 1995 known as the Asia-Pacific Regional Operations Center (APROC) initiative. The goals of APROC were fourfold: 1) to respond to regionalism in global trade, 2) increase the presence of TNCs in Taiwan, 3) replace Hong Kong as the staging center for world trade with China, 4) continue a path toward economic liberalization.[45] Taiwan aimed to implement APROC by developing competitive clusters in six areas: manufacturing, air transport, sea transport, financial services, telecommunications, and media. However, the goals of APROC were not only economic. There was a realization that the more interconnected Taiwan was with the rest of the world, the stronger its political position would be in the international system. Critics of the APROC plan cited the impossibility of becoming a true regional operations center without having normal trade relations and direct transport links with China.[46]

Taiwan's Economic Structure

After three decades of robust growth, Taiwan could no longer be considered a developing economy by 1990 with a GDP of $153 billion. The economy grew in excess of 7% throughout the 1990s (excepting 1998's regional recession) and by 1999 GDP reached $283 billion. The per capita GDP escalated to $10,918 ($16,500 purchasing power parity).[47]

In contrast with Asian neighbors Korea and Japan, Taiwan placed a high reliance on small and medium-sized enterprises (SMEs) to lead export growth through the 1970s, and SMEs remained a significant element of the economy through the 1990s. With the appreciation of the NT Dollar in the 1980s, many SMEs moved operations abroad and the most successful became full-fledged TNCs in the 1990s.[48] A good example of this phenomenon was Acer Computer, which became one of the leading global computer TNCs in the 1990s and the third largest enterprise in Taiwan by 1999. At the same time, large state-owned companies – primarily in utilities and steel -- remained a significant element of the business landscape even as the government moved to privatize some of these firms. A review of the largest corporations in 1994 and 1999 (figure 3.8) is illustrative.

Figure 3.8: Largest Taiwanese Enterprises

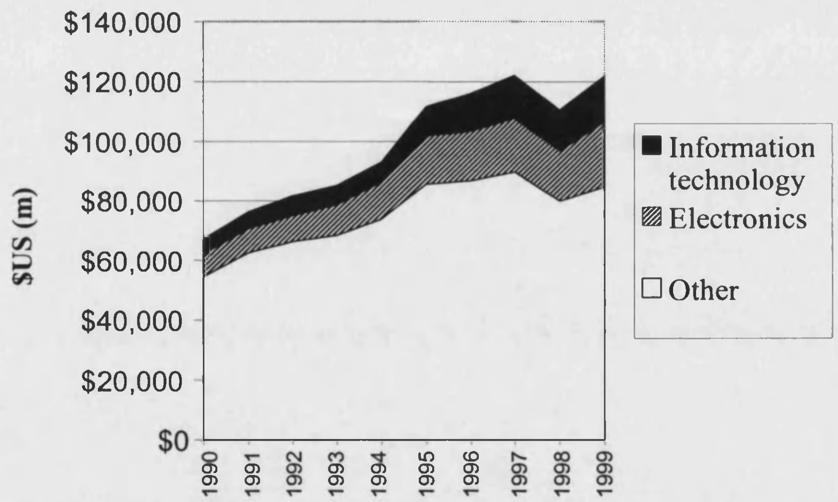
	1994		1999	
Rank	Company	Sales ($US m)	Company	Sales ($US M)
1	Chinese Petroleum Corp. (oil refining)	10,982	Chinese Petroleum Corp. (oil refining)	11,074
2	Taiwan Power (power generation)	8,467	Taiwan Power (power generation)	8,552
3	Dir. Gen. Of Telecom. (telecommunications)	5,419	Acer (computers)	6,685
4	Taiwan Tobacco & Wine (food)	3,912	Chungwa Telecom (telecommunications)	5,758
5	Acer (computers)	3,199	Nan Ya Plastics (petrochemicals)	3,703
6	Nan Ya Plastics (petrochemicals)	2,909	Mitac International Corp.(Computers)	3,211
7	China Steel Corp. (steel Products)	2,893	Taiwan Tobacco & Wine (food)	3,180
8	Hotai Motor (car dealership)	2,520	China Steel Corp. (steel products)	2,939
9	President Enterprises (drinks, food)	2,119	Tatung (Consumer Electronics)	2,809
10	***China Airlines (air transport)***	***1,625***	President Enterprises (drinks, food)	2,110
			15: China Airlines (air transport)	***1,549***
			20: Eva Air (air transport)	***1,281***

Source: Asia Week 24 November 1995 & 19 November 1999.

The largest three companies in 1994 were state owned utilities Taiwan Power, Chinese Petroleum Corporation, and the Director General of Telecommunications. Despite the growth of electronics exports, Acer was the only electronics firm in the top 10. China Airlines was the tenth largest firm. By 1999, two electronics firms – Mitac International, and Tatung – joined Acer on the top ten list. The two largest air carriers, China Airlines and EVA Air, were ranked 15th and 20th respectively. China Airlines was smaller in 1999 than 1990, as a result of the emergence of EVA Air as a competitor, liberal transport policies, and the growth of firms in other sectors.

Exports were a significant driver of economic growth in the 1990s, growing from $67.2 billion in 1990 to $121 billion (43% of GDP) in 1999. As a vital element of the economy, exports as a percentage of GDP ranged from 43% – 47% over the decade. In 1990, the textiles and garments made up 15% of exports, while electronic products were the next largest group with 11%. Like many Asian countries, the composition of exports in Taiwan shifted significantly in the 1990's to favor high technology goods. By 1999, electronic and information technology products were the two largest export groups (figure 3.9). These two groups accounted for 31% all exports in 1999 and 44% ($24 billion) of the $54 billion in export growth over the decade. 49 As a result, Taiwan held a major position in a number of key sectors in computer markets in the late 1990s including 72% of world market for computer mouse devices, 65% of motherboards, 64% keyboards, and 64% of scanners.50 Other major export groups at the close of the decade were decidedly less "high technology," including garments, metals, and machinery.

Figure 3.9: Taiwan Exports 1990 - 1999

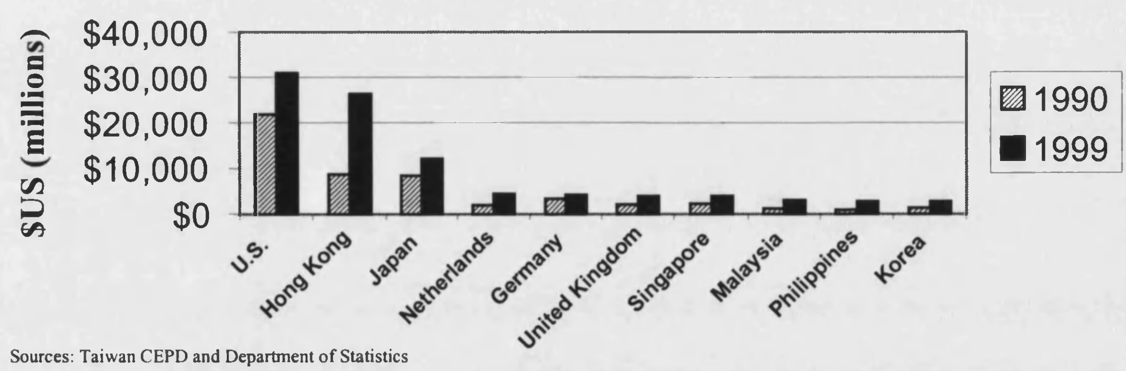


Sources: CEPD, Ministry of Finance

Like the Philippines, Taiwan's largest export market throughout the 1990s was the U.S., which received $30.9 billion (25%) of $121 billion total exports in 1999. A significant portion of these exports was microchips and integrated circuits to U.S. TNCs. The relative importance of the U.S. market, however, decreased as trade with other countries grew. The largest shift in trading patterns was with Taiwan's second largest trade partner, Hong Kong, which took $26.3 billion of exports in 1999 (figure 3.10). Exports to Hong Kong grew by more than 200% during the decade, signifying tighter economic linkage not only with Hong

Kong, but also with mainland China (Hong Kong was the only authorized port of entry). Japan was the third largest export market in 1999, receiving nearly 12 billion (10%) of outbound trade. Following Japan on the top ten list of export destinations were three European partners -- the Netherlands, Germany, and the United Kingdom. Asian trade partners Singapore, Malaysia, the Philippines, and South Korea were also among the top ten export markets in 1999.[51]

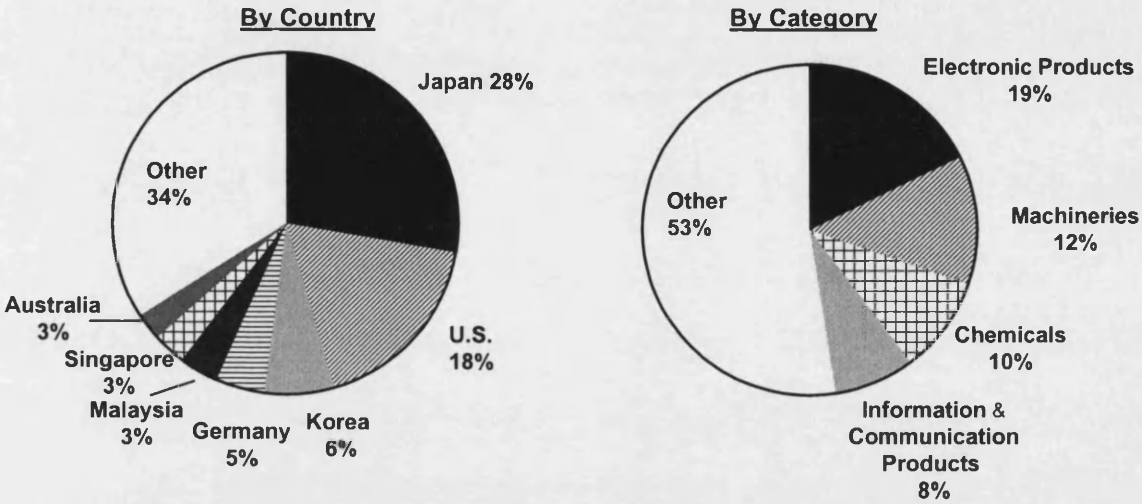
Figure 3.10: Taiwan Exports By Country, 1990 - 1999



Sources: Taiwan CEPD and Department of Statistics

Imports grew even faster than exports throughout the 1990s as Taiwan sought to reduce its ballooning trade surplus by easing tariffs and trade restrictions; imports doubled from $54.7 billion in 1990 to $110.7 billion in 1999. The largest source of imports was Japan, which supplied 28% of imports in 1999 (figure 3.11). The second largest source of imports was the U.S., with 18% of the total. Following Japan and the U.S., there was a significant drop-off in the size of import market with South Korea (6%), Germany (5%), and Malaysia (5%) making up the next-largest import markets. Hong Kong was not one of the ten largest import markets, indicating that trade with China was largely a one-way affair -- exports. Other major import markets included Singapore, Thailand, Indonesia, and the Philippines.

Figure 3.11: 1999 Taiwan Imports
Total: $110.7 B (US)



Sources: Taiwan CEPD, Ministry of Finance

Imports from the Philippines increased by almost an order of magnitude during the decade in part due to the significant FDI by Taiwanese information technology firms. By product category, the largest imports in 1999 were electronic components (19%), machineries (12%), chemicals (10%), and information and communication products 8%.[52] As Maguire (1998) noted, Taiwan is highly dependent on the import of electronic and electrical components, and the import of integrated circuits from Japan remains a crucial factor (and potential vulnerability) in the functioning of Taiwan's computer industry.[53]

Air Cargo Sector Development and Commercial Policies

1990 Air Cargo Sector Circumstances

Entering the 1990s, the air cargo market in Taiwan was heavily regulated but enjoying significant growth as a result of growing exports. In 1990, the air cargo market size was 3.7 million ton-kilometers with estimated air cargo revenues less than $1 billion. This was a significant increase versus the total market size of 1.0 million ton-kilometers recorded in 1980.[54] By value of trade, 14% of exports and 21% of imports were carried by air cargo. Maritime was the clearly the dominant mode of transportation for international trade in 1990.

China Airlines (CAL) was the dominant air carrier in Taiwan in 1990. The carrier was under de-facto state control, with 72% of its equity controlled by a government-linked foundation.[55] CAL was founded in 1959 and inaugurated international service in the mid-1960's to operate supply missions for the Vietnam War. A government policy change in the late 1980's to create competition had opened the domestic market to new competitors. The Evergreen Group, a major maritime services company, was preparing to launch a new carrier (EVA Airlines) in the late 1980s. Another new carrier, Far Eastern Air Transport, established a position in the domestic market. While the government removed legal barriers to market entry, air carriers still needed pricing approval from the Civil Aviation Authority for domestic routes. Because of Taiwan's diplomatic isolation and its self-imposed ban on direct flights to mainland China, international air links were extremely limited. Moreover, opposition by the PRC to flights by "flag carriers" from other countries to Taiwan had forced some firms to create subsidiaries with different names to avoid "official" recognition of Taiwan. Air France, for example, operated a subsidiary serving Taiwan under the name "Air Orient." China also prohibited carriers serving Taiwan from utilizing its airspace. This forced many air carriers, particularly European ones, into time-consuming diversions of up to three hours that reduced air cargo business profitability. PRC pressure also deterred some countries from establishing any air links with Taiwan.[56] Nonetheless, there were air service agreements in effect covering cargo with a number of important trading partners, such as the United States, Japan, Hong Kong, and the Netherlands. International air cargo firms with significant presence in 1990 included Japan Air Lines, Cathay Pacific (Hong Kong), KLM (Netherlands), and three U.S. carriers – Flying Tiger, United, and Northwest. Express courier DHL also operated in Taiwan, but relied primarily on available belly space in passenger airlines.

Air cargo infrastructure was located primarily in and around the 20-year-old Chiang Kai Shek (CKS) International Airport near Taipei (figure 3.7). CKS was the focus of 95% of Taiwan's international air cargo traffic in 1990.[57] The other international air cargo point of entry was through Kaohsiung – Taiwan's second largest city and home of its largest maritime port. The CKS air cargo terminal was owned and operated by the Ministry of Transportation and Communication, which was also the monopoly supplier of ground handling services. Like many countries at the time, customs operations were slow, not automated, and cumbersome. Average clearance times at CKS exceeded five days.[58]

There were also a number of key restrictions on FDI in the air cargo sector. Allowable foreign ownership levels were as follows:

- Air carriers: 33% foreign equity
- Air cargo infrastructure: 0% foreign equity
- Freight forwarders: 33% foreign equity
- Ground handling: 33% foreign equity.[59]

Overall, there was a sense entering the 1990s that Taiwan – already hindered by its de facto state status – was falling behind other Asian cities such as Hong Kong and Singapore in provision of competitive infrastructure. In many respects, Taiwan's situation was typical of many Asian countries at the time: air operations were supported by a designated flag carrier, key elements of infrastructure were state-owned, and there was minimal focus on air cargo as a distinct service infrastructure required for international competitiveness. This approach was to change significantly in the ensuing years.

Air Cargo Commercial Policies 1990 – 1999

Trade Policy

The 1990's were a very active period for liberalization of air cargo trade policy (figure 3.12), all under the administration of President Lee Teng-hui. In total, 24 air cargo ASAs were completed with all of these agreements liberalizing air cargo service (increasing cargo capacity, points served, and/or designated carriers). Much like the experience of the Philippines with PEAC, a new business interest emerged to challenge the traditional air carrier. In this case, EVA Air initiated service in 1991 and immediately focused on developing new international ASAs as a means of building its route structure and business base. In the 1990 – 1992 timeframe, five cargo ASAs were negotiated with Dubai, Brunei, Australia, New Zealand, and Bulgaria – all liberalized air cargo services. In 1992, South Korea gave official diplomatic recognition to the PRC. As a result, Taiwan abrogated the existing passenger-oriented ASA with South Korea and severed direct air links between the two countries. South Korean air carriers were even denied first freedom rights to overfly Taiwan en route to another country. Although specific cargo provisions were not part of the pre-1992 ASA, direct air cargo flights between these two trading partners were off-limits for the 1992 – 2000 timeframe. This incident illustrates the influence of international politics on air transportation policy.

In the 1993 – 1995 timeframe, Taiwan negotiated 11 ASAs -- all liberalized air cargo services. Two major European economic powers, France and Germany, initiated air cargo flights for the first time in 1993. The French agreement was notable in that it authorized new entrant EVA Air as the only designated Taiwan air cargo carrier to the chagrin of China Airlines. In 1995, the Ministry of Transportation and Communication (MOTC) announced an "open skies" policy for Taiwan; the objective in negotiating ASAs would be to remove all restrictions for 3rd and 4th freedoms, and to liberalize 5th and 6th freedom rights on a reciprocal basis.[60] Following this policy statement, a very liberal ASA was completed with Singapore that included unlimited 5th freedom rights within Asia. The first ASA with a Latin American country, Panama, was completed in the same year, as well as an "open skies" agreement with Abu Dhabi, an important stopover for European-Asian flights. Four ASAs were completed in 1996-97, including the first cargo agreement with the Philippines (an emerging trading partner) and a treaty with Malaysia that substantially increased cargo capacity.

The decade closed with six ASAs in 1998-99, five of which liberalized air cargo service. In 1998, an open skies agreement was reached with the United States that removed all capacity restraints (including 5th freedom traffic), allowed cargo self-handling for American carriers, and added several U.S. points of entry of Taiwanese carriers. The significance of this agreement was that it included, for the first time, ground-handling provisions that allowed UPS to develop hub operations in Taiwan. The agreement also allowed direct Taiwan – S. Korea flights by American carriers, a privilege that incumbent carriers in both countries did not enjoy. An open skies cargo agreement was finalized in 1998 with Australia, as well as an ASA with Britain that gave EVA rights to fly to a second important European destination. The end of 1999 brought the cessation of direct flights to the Philippines, a dispute discussed earlier in this chapter.

There were also a number of important reforms in air cargo customs administration in the 1990's. In 1990, a customs automation initiative was launched that created an electronic filing network known as Tradevan. Tradevan substantially reduced customs clearance time by facilitating electronic filing and information sharing between shippers, consignees, service providers, and customs officials. Another major reform, the Express Customs Agreement, was initiated in 1995. This agreement, largely based on principles established in the World Customs Organization's Kyoto Convention, ushered in 24-hour customs by creating a customs express handling unit to work directly with shippers and forwarders. UPS and FedEx were given their own express handling unit, while all other shippers shared the services of a third unit at CKS. Eventually, 24-hour customs was expanded to science parks and export processing zones. In 1999, an express handling unit was established at Kaohsiung for UPS. A third major wave of customs reforms were launched in 1997 that established pre-clearance procedures, expanded sharing of customs information with other countries (including Australia and the U.S.), and eliminated duties on low value goods. The net effect of these reforms was impressive: the average speed of import clearance time at CKS was reduced from 5.2 hours in the early 1990's to 0.88 hours by June 1999.[61]

Foreign Direct Investment Policy

The APROC plan, which underpinned industry policy, also targeted laws involving foreign direct investment in air cargo operations and infrastructure. First and foremost, there was a strong focus on attracting one of the "big four" air cargo integrators to set up a hub in Taiwan. After a series of unsuccessful government negotiations with FedEx, UPS established Taipei as its Asian air cargo hub in 1996. UPS invested $400 million as part of this move and was allowed to set up its own distribution center at CKS, including cargo self-handling and the previously mentioned dedicated 24-hour customs unit. In the following year, FedEx expanded its presence at CKS and was also given the right to manage it own (albeit smaller) distribution facility at CKS. The UPS and FedEx dedicated facilities and customs units at space-limited CKS conferred to them significant operational advantages because all other air cargo firms (including CAL and EVA) were forced to share a single facility and customs unit. DHL, the integrator with the longest history in Taiwan, petitioned the government for similar facilities but was denied.[62]

APROC also liberalized restrictions on foreign investment in freight forwarding, ground handling, and the cargo terminal operations. In 1998, the allowable limit of foreign ownership was increased from 33% to 50% as a result of Taiwan's bilateral World Trade Organization negotiations with Switzerland.[63] DHL took advantage of these changes and announced a $30 expansion (NT$ 1 billion) in logistics facilities throughout Taiwan in 1999. A law in 1996 also made it possible for foreign-owned aircraft to be registered and operated in Taiwan – an important consideration given the popularity of aircraft leasing throughout the global aviation industry. Despite these reforms, the 33% foreign ownership limit on air carriers remained unchanged.

Industry Policy

Air cargo industry policy was strongly influenced by the Asia Pacific Regional Operations Center Initiative, launched in 1995 by the Council of Economic Planning and Development (CEPD). Under the APROC banner, Taiwan created an explicit national strategy to become the air cargo hub of Asia, and several policy initiatives related to air cargo

Figure 3.12: Taiwan Air Cargo Commercial Policies, 1990 - 1999

Policies not enacted in *Italics*

	Trade Policy	FDI Policy	Industry Policy
1990	Taiwan-Dubai ASA (+) Air customs automation initiative		
1991	Taiwan-Brunei ASA (+) Taiwan-Australia ASA (+) Taiwan-New Zealand ASA (+)		
1992	Taiwan-Bulgaria ASA (+) Creation of Taipei Airline Association (industry coordination body for ASAs) Severed direct passenger air links with South Korea		
1993	Taiwan-Germany ASA (+) Taiwan-France ASA (+) Taiwan-Maldive Island ASA (+)		
1994			
1995	Adopts "open skies" policy for international flights Taiwan-Singapore ASA (+) Taiwan-Vietnam ASA (+) Taiwan-Panama ASA (+) Taiwan-Abu-Dhabi "open skies" ASA (+) Taiwan-Switzerland ASA (+) Taiwan-Belgian ASA (+) Taiwan-Indonesia ASA (+) 1995 Express Customs Agreement (includes 24 hour)	*Rejected FedEx demands for establishing Taipei air cargo hub, including 24 hour customs and cargo self-handling*	Approved Asia-Pacific Regional Operations Center (APROC) initiative
1996	Taiwan-Philippine ASA (+) Taiwan-Hong Kong ASA (+)	Approved UPS plan to establish Taipei air cargo hub, including cargo self-handling Legalized operation of foreign-owned aircraft in Taiwan Granted FedEx authority to operate its own distribution center at CKS	Approved plan to privatize and expand CKS Cargo Terminals
1997	Taiwan-Malaysia ASA (+) Taiwan-Luxembourg ASA (+) Approved WTO customs valuation agreement Implemented air cargo customs process streamlining initiative		Approved plan to establish "air city" around CKS airport to facilitate air logistics development
1998	Taiwan-USA "open skies" ASA (+) Taiwan-Australia ASA (+) Taiwan-Britain ASA (+)	Increased allowable foreign ownership of freight forwarding, ground handling, and cargo terminal operators to 50%.	Cut ground handling registration fees Cut aircraft landing fees Cut alcraft registration fees
1999	Taiwan-Palau ASA (+) Taiwan-Thailand ASA (+) Philippines abrogates 1996 ASA; cessation of direct flights Established 24 hour customs at Kaohsiung airport	*Rejected Singapore Airlines bid to purchase 25% of China Airlines*	Announced plan to privatize China Airlines Introduced ground handling competition at CKS and other major airports
1990s	*Did not establish direct air links to Mainland China*	*Did not enact CEPD proposal to increase allowable foreign ownership of air carriers to 50%*	

Note: Includes only ASAs with specific cargo provisions "+" designates ASA liberalization; "-" designates restriction

Sources: Interviews, analysis, government documentation, ROC Civil Aeronautics Association industry development subsequently undertaken. In 1996, a policy to privatize the air cargo terminal (terminal #1) at CKS -- Taiwan's primary air cargo terminal -- was announced, as well as the intention of building a second air cargo terminal (terminal #2) on a build-operate-transfer approach. In total, air cargo capacity would be increased by more than 500%. In 1999, a CAL-led coalition including Far Eastern Air Transport and UPS won the competition to operated and manage terminal #1. A coalition led by EVA Airlines (including FedEx) agreed to develop terminal #2 by 2003.[64] In 1997, plans to develop an "air city" around CKS airport, including dedicated land for air cargo firms, logistics businesses, and businesses dependent on air cargo were completed and the government began rezoning and procuring land around the airport in Taoyan County. In total, 63 hectares with a budget of NT$9.6 billion (approximately $240 million) were planned for development.[65]

Industry policy also included several reforms centered on the ground-handling element of air cargo. In 1999, ground-handling competition was authorized at 10 airports; CKS became the first airport to introduce ground-handling competition. There was another major issue related to privatization: what to do with CAL? Although CAL was officially in the private sector, 72% of the shares were controlled by the China Development Aviation Foundation, an organization closely affiliated with the Taiwanese government (a major share holder). A series of aviation mishaps involving more than 500 deaths resulted in calls for a shakeup of CAL management and culture; in the late 1990s, a policy was announced for the government-dominated foundation to sell a 35% stake to private shareholders.[66] However, the 33% limit on foreign ownership remained intact.

In summary, air cargo commercial policies enacted in the 1990s changed the face of the air cargo industry in Taiwan. China Airlines, which once dominated air cargo, faced competition from not only a new domestic competitor (EVA), but three of the "big four" air cargo integrators. International capacity restrictions on air cargo traffic were liberalized considerably. And many FDI barriers were removed. The expansion of the air cargo sector had become a central element of Taiwan's economic strategy, and despite a ban on direct air travel to China, Taiwan sought to become an air logistics hub for Asia.

Conclusion

The 1990s were an active period of air cargo policy development in The Philippines and Taiwan. Both countries expanded international air service rights for cargo flights considerably. This research identified 21 air service agreements liberalizing cargo rights in the Philippines while the comparable number in Taiwan was 24. Both countries successfully attracted FDI from one or more air cargo integrators, upgraded air cargo infrastructure, and undertook customs reforms initiatives. At the same time, both took measures to protect their flag carriers from significant investment by foreign air carriers.

Yet there were some notable differences in air cargo policy development. In Taiwan, a domestic competitor (EVA Air) emerged to challenge the incumbent flag carrier while the most significant domestic competitor in the Philippines (Pacific East Asia Cargo) fell under control of Lucio Tan, owner of Philippine Airlines. Taiwan's national government developed a comprehensive blueprint for development of the air cargo sector (APROC) while the Philippines relied more on devolution and incentives created by special economic zones. Finally, Taiwan followed a consistent path towards sectoral liberalization while the policy direction in the Philippines reversed course in the late 1990s from liberalization to protection.

With a description of air cargo commercial policy for the Philippines and Taiwan complete, the next chapter examines the economic consequences of these policies.

NOTES

[1] Data cited in this section are from the online edition of the 1999 Central Intelligence Agency World Fact Book. See (www.odci.gov/cia/publications/factbook).
[2] The tri-cameral organization includes executive, judicial and legislative branches. The legislative branch includes a Senate, elected at large from throughout the country, and House of Representatives, which features regional representation.
[3] A good summary of the events surrounding the non-renewal of the R.P. - U.S. military forces agreement can be found in Reid and Guerrero (1995).
[4] *Ibid.*, p. 236.
[5] Chrisostomo (1997), p. 121.
[6] A freeport allows duty-free transit for goods into and out of this special economic zone. Goods are not subject to duties unless they are introduced to the domestic economy.
[7] *The Economist*, 29 January 2000.
[8] Figures in this paragraph are from the Philippine National Statistical Coordination Board, The Central Intelligence Agency (1999), and the APEC (http://www.apec.org).
[9] Sources are APEC and Asian Development Bank.
[10] Cited in May 1999 issue of *Philippine Business Report*, published by Philippine Department of Trade and Industry.
[11] Export and import figures in this paragraph are from various issues *of Foreign Trade Statistics of the Philippines*. See National Statistics Office (1990 – 1999).
[12] Trade figures in this paragraph are from the Philippine National Statistics Office (1990 *et al*).
[13] *Ibid.*
[14] Market size estimates are extrapolated based on PAL's estimated market share and published Philippine National Statistics Office and PAL cargo activity figures.
[15] Philippine National Statistics Office (1990).
[16] Interviews.
[17] 1990 Foreign Trade Statistics of the Philippines, National Statistics Office.
[18] Interviews.
[19] Interviews. Manila International Airport was renamed Ninoy Aquino International Airport in the late 1980's.
[20] Continental wet-leased aircraft to Air Micronesia, which provided airlift to DHL.
[21] There were at least 10 additional ten ASAs focused on passenger travel during this timeframe that indirectly increased cargo capacity (belly capacity).
[22] The Philippines argued that the 240 metric ton limit was equivalent to two Boeing 747 freighters; Taiwan contended that it was equivalent to three 747s.
[23] *Philippine News Online Edition* (www.philippinenews.com), 13 October 1999. New Zealand first offered open skies in the mid-1990s. In this case, Estrada turned down an offer from the New Zealand Prime Minister at the 1999 APEC Summit.
[24] Interviews. The changes were part of GATS commitments for Postal and Courier Services.
[25] Cited in *Asian Wall Street Journal*, 31 July 1998. Allowable BOT profit margins were 17% – 25%.
[26] Interviews.
[27] Philippine Department of Trade and Communications (1999).
[28] *The Economist*, 5 February 2000.
[29] Interviews. The CAB did establish a three person operating committee that was staffed with two Tan allies.
[30] Interviews.
[31] Council for Economic Planning and Development (1999b), p. 40.
[32] Facts in the first two paragraphs are from the online edition of the 1999 Central Intelligence Agency World Fact Book. See (www.odci.gov/cia/publications/factbook).
[33] Maguire (1998), p. 53.
[34] Wade (1990) p. 93.
[35] Wade (1990); GDP per capita figures Council for Economic Planning and Development (1999a), p. 48.
[36] Ferdinand (1996), p. 38.
[37] Maguire (1998), p. 49.
[38] Chi (1996), pp. 552 – 576.

[39] Maguire (1998), p.157.
[40] McBeath (1998), p. 210.
[41] Maguire (1998); pp. 143-144, p. 172, p.180 - 181.
[42] McBeath (1998), p. 186.
[43] Maguire (1998), p. 192.
[44] McBeath (1998), p. 198.
[45] *Ibid.*
[46] Interviews. The only direct transport links were through Hong Kong.
[47] Data are from the Internet home page of the Taiwan Department of Statistics, Ministry of Finance. (www.moea.gov.tw). Accessed January – March 2000. The GDP purchasing power parity figure is for 1998 and is from the online edition of the 1999 Central Intelligence Agency World Fact Book. See (www.odci.gov/cia/publications/factbook).
[48] McBeath (1990), p. 39.
[49] Sources are CEPD (1999) and the Taiwan Ministry of Finance Internet home page. (www.moea.gov.tw)
[50] Maguire (1998), p. 54.
[51] Export figures are from Council for Economic Planning and Development (1999) and the Department of Statistics Internet home page (www.moea.gov.tw). Accessed January – March 2000.
[52] Import figures are from *Ibid. (both references).*
[53] Maguire (1998), p. 54.
[54] RTK figures are from CEPD (1999b); revenue figures are estimated based on reported air cargo revenue data.
[55] CAL was transferred from state ownership to 72% ownership of the government-linked China Aviation Development Foundation in 1988. The ownership structure remained murky and most observers considered CAL to be a state-owned airline.
[56] Interviews. An example of a country where PRC pressure deterred official air links was India.
[57] Source is Taiwan Civil Aviation Authority.
[58] ROC Ministry of Finance (1999), p. 12.
[59] Sources are CEPD and Civil Aeronautics Administration.
[60] Interviews
[61] ROC Ministry of Finance (1999), p. 12.
[62] Interviews.
[63] *APROC Newsletter*, December 1998.
[64] China Airlines Internet home page (http://www.china-airlines.com). Accessed August 2000.
[65] *APROC Newsletter*, August 1999.
[66] *Cargonews Asia*, 22 November 1999.

Chapter IV: The Economic Impact Of Air Cargo Commercial Policies

With policy choices come economic consequences. This chapter will examine the economic impact of commercial policy choices on the air cargo sector as well as their impact on the macro-economy – including trade, FDI, and employment. Did the changing patterns of trade outlined in the previous chapter, including the rapid expansion of high technology exports, affect the demand for air cargo services? How did policy choices affect FDI? Are there cases where policies with a positive economic benefit were not pursued? Answering these questions will set the stage for the political analysis to follow in the subsequent three chapters.

It must be noted that the methodological approach in this chapter is not formal economic analysis; rather, the analysis is high-level and primarily qualitative. The objective is to identify, where possible, tangible manifestations of air cargo policy in the context of economic activity and international trade. The Philippines will be analyzed first, followed by Taiwan.

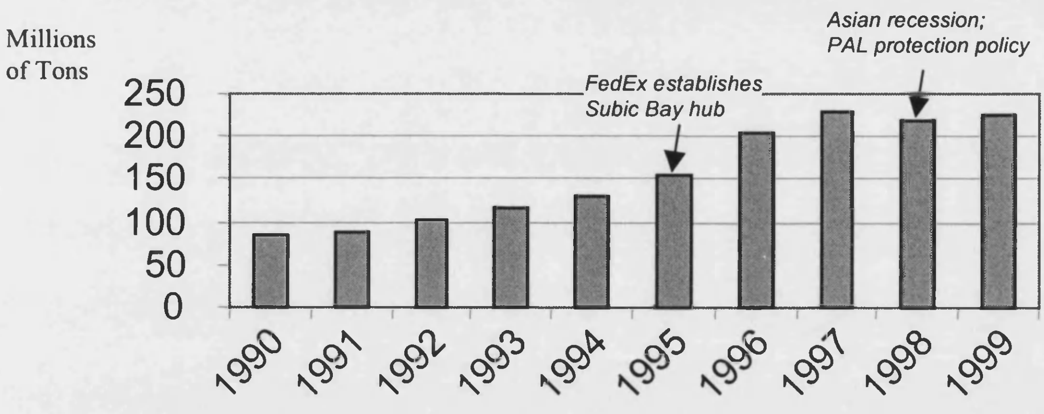
THE PHILIPPINES

Impact On Air Cargo Industry

The Philippine air cargo industry experienced significant growth in the 1990s, nearly tripling the volume on air cargo traffic over this timeframe. Air cargo activity accelerated during the 1992 to 1997 timeframe until a regional recession and protectionist commercial policies reversed this trend in 1998. Growth resumed the following year. The distribution of air cargo traffic also changed during the decade as Subic Bay, Clark, and Davao joined

Mactan-Cebu and Manila's Ninoy Aquino International Airport (NAIA) as international cargo airports. NAIA, which handled 81% of the country's air cargo exports and 84% of imports in 1990, saw these figures reduced to 44% and 57%, respectively by 1997.[1]

Figure 4.1: The Philippine Air Cargo Industry, 1990 - 1999



Source: MergeGlobal, analysis

There was also a significant change in the key suppliers (figure 4.2). A market once dominated by Philippine Airlines and a handful of foreign carriers was opened up to competition and three of the "big four" air cargo integrators (FedEx, DHL, TNT) made Philippines the center of their Asian network for at least part of the decade while the fourth (UPS) entered the market in 1997. A domestic all-cargo carrier, Pacific East Asia Cargo, was started and began to develop an international network with joint venture partner TNT before ceasing operations in 1999. And some prominent foreign combination carriers became important air cargo suppliers including Singapore Airlines, British Airways, Japan Airlines, and Northwest Airlines (U.S.). Overall, the competitive intensity of the air cargo industry increased significantly as a result of foreign competition. Despite significant market growth, there remained only one significant domestic supplier at the end of the decade – Philippine Airlines.[2]

Finally, the state of Philippine customs operations changed during the decade. The reforms ushered in by FedEx and Subic Bay made customs operations at this airport world class. Progress was not as pronounced elsewhere. Despite significant reform initiatives under the Ramos Administration, customs at Ninoy Aquino International Airport had one of the worst reputations in East Asia.[3] A FedEx executive summarized the contrast: "Philippine customs is outstanding a Subic Bay, but outside of Subic you deal with old laws that you see in every other ASEAN country except Singapore."[4]

Figure 4.2: The Philippine Air Cargo Industry, 1990 and 1999

		1990	1999
International Cargo Traffic (millions of kg.)		83	224
International Cargo Airports*		2: Ninoy Aquino, Mactan-Cebu	5: Ninoy Aquino, Mactan-Cebu, Subic Bay, Clark, Davao
Regulation	Domestic	Tightly Regulated; single supplier	Deregulated; multiple suppliers
	International	Limited international capacity – few ASA's allocated cargo rights	ASAs with more than 20 countries allocated cargo rights
Key Air Cargo Suppliers	All Cargo & Integrated	Flying Tiger	FedEx (hub), UPS, DHL, TNT, Cargolux
	Combination	PAL, Northwest, Lufthansa, Cathay Pacific, Japan Airlines, British Airways	PAL, China Airlines, Cathay Pacific, Japan Airlines, Singapore Airlines, British Airways, Northwest

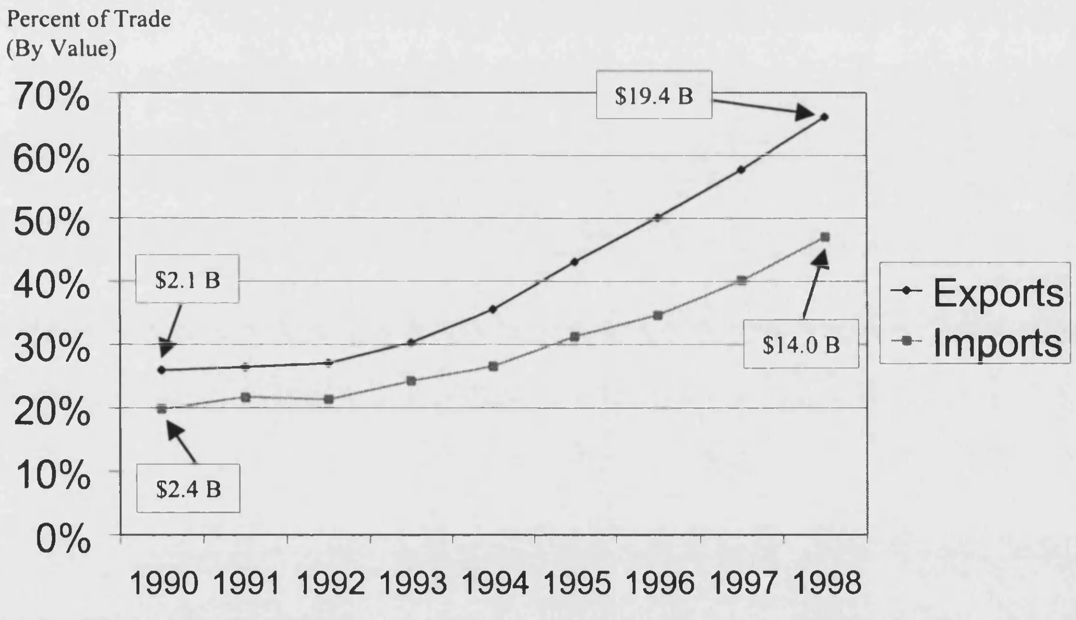
Sources: MergeGlobal, Philippine NSO, Interviews, Analysis
Note: TNT and DHL depend primarily on other carriers for airlift
* Laoag and General Santos had minor levels of international flights

Macroeconomic Impact

Trade

By any measure, the air cargo sector in the Philippines grew significantly in the 1990s as a result of demand generated by surging high technology trade and improved services (e.g., integrated air cargo). Along with this growth, the dependence of international trade on air cargo services escalated over the decade. In 1990, 26% of exports by value moved by air; by 1998 the figure skyrocketed to 66%. The use of air cargo for imports over this timeframe also surged (from 20% to 47%), but did not increase to the same extent as exports because of the mixture of lower value-added goods in Philippine imports. The story is even more compelling when these high rates of air cargo penetration are combined with the magnitude of trade growth. In 1990, air cargo carried $4.5 billion of international trade; by 1998, this figure was $33.4 billion.[5] In a relatively short period of time, air cargo became the dominant mode of trade transportation in the Philippines. Rather than a luxury service, it became an indispensable tool of international commerce that helped to facilitate an era of export-led growth.

Figure 4.3: Philippine International Trade Carried By Air Cargo



source: Philippine National Statistics Office

Air cargo service liberalization occurred with all of the largest export markets during the study period. The largest single market – the U.S. – also had the most liberal air service agreement (ASA) including no capacity restrictions and $5^{th}/6^{th}$ freedom rights. A single American carrier, FedEx, operated 14 flights per day at the close of the decade. An ASA liberalizing cargo capacity was also completed with the next largest export market, Japan, but was more restrictive than the U.S. version. Each side was allowed 21 interchangeable passenger or cargo flights per week for and Nagoya – one of the most attractive destinations – was not included in the agreement. In contrast, U.S. carriers were flying more than 20 all-cargo flights *per day* by the end of the decade although much of this traffic was intra-Asia as part of FedEx's hub.

Figure 4.4: Philippine ASAs With Largest Export Markets

	1999 Exports		1991 - 1999 Exports		
Country	**Total**	**% total**	**Total Increase**	**% Increase**	**Air Cargo Air Service Agreement Activity**
U.S.	$ 10,466	30%	7,323	333%	ASA in 1995 increased capacity; est. 5th and 6th freedom rights and provisions for "hubbing"
Japan	$ 4,661	13%	2,890	263%	1996 ASA increased capacity to 21 B747s per week per country; Nagoya off-limits
Taiwan	$ 2,993	9%	2,784	1432%	1992 and 1996 ASAs expanded cargo rights; 1999/2000 agreement reduced number of flights
Netherlands	$ 2,864	8%	2,526	847%	ASA in 1998 expanded capacity to 250 tons/week (approx. 3 B747s)
Singapore	$ 2,466	7%	2,237	1077%	1994 ASA expanded capacity; 1997 Singapore "open skies" proposal rejected
Hong Kong	$ 1,946	6%	1,555	498%	1993 ASA est. right for PEAC to fly to H.K.; 1997 ASA expanded capacity significantly
U.K.	$ 1,765	5%	1,394	476%	1996 ASA expanded capacity; limited 5th freedom rights available
Germany	$ 1,228	4%	726	245%	1999 ASA est. specific cargo rights through Lufthansa-PAL codeshare; 3 flts/week
Other	$ 6,643	19%	4,758	352%	
Total	**$ 35,032**		**$ 26,193**	**396%**	

source: Philippine NSO & CAB; interviews

The fastest growing export market of the decade was Taiwan, where exports grew 1,432% over the decade as a result of significant technology investment by Taiwanese high technology firms. Cargo capacity was established in a 1992 agreement an agreement that gave PEAC, China Airlines, and EVA Airways – three carriers with significant cargo business focus -- the right to fly cargo routes between the two countries. A 1996 agreement further expanded air cargo capacity. However, the 1999 row initiated by the Estrada administration suspended the 1996 ASA and ultimately terminated flights between these two countries. ASAs expanding cargo capacity were completed with the next five largest export markets: Netherlands, Singapore, Hong Kong, U.K. and Germany. The 1997 Hong Kong agreement was particularly liberal. However, an "open skies" overture by Singapore in the same year was rejected. Overall, there appears to be a strong correlation between air cargo capacity liberalization and key trading relationships. The Philippine's eight largest export markets were all covered in new ASAs liberalizing air cargo service in the 1990s. This, however, does not prove causality, i.e. liberalization of air cargo service *caused* an increase in trade. There is significant anecdotal evidence in the Philippines to argue that in some instances there was indeed causality. The best example is the impact of the FedEx hub at Subic Bay on the decisions of many high technology TNCs, such as Acer Computer, to locate in the Philippines.[6] Recent research by Kenneth Button and Roger Stough (1998) documented the phenomenon of hub airports acting as a magnet for high technology development (and hence trade).[7] The qualified assertion at this point is that international trade in the Philippines was very dependent on air cargo service and in some instances, air cargo service facilitated trade.

FDI and Employment

Net foreign direct investment (FDI) in the Philippines grew substantially in the 1990s, expanding from $480 million in 1990 to $1.7 billion in 1998. The largest single year of net FDI was 1996, when $3.5 billion was invested.[8] The impact of air cargo commercial policy on FDI was felt mostly in the electronics sector, rather than the air cargo sector. Total FDI by air cargo firms (excluding mobile aircraft assets) was in the low hundreds of millions of dollars in the 1990s.[9] Much of the infrastructure expansion was either funded by development agencies, such as the World Bank and Asian Development Bank, or simply inherited from the U.S. military withdrawal. The Philippine Constitution made FDI in ground infrastructure difficult, with foreign ownership capped at 40%.

There is however a correlation, albeit secondary, between FDI in the electronics sector (the dominant FDI category) and the liberalization of air cargo service as a result of the shift to "just in time" global supply chains described in Chapter Two. According to current and former officials from the Subic Bay Metropolitan Authority (one of the largest recipients of FDI) the establishment of the FedEx hub was crucial for the decision by many TNCs to invest in the Philippines for the following reasons:

- FedEx offered standard 24-hour service anywhere in Asia for the first time.
- Customers at FedEx's hub received lower rates and later cut-off times (by as much as eight hours) for next day shipments.
- Non-FedEx customers (including those of strike-prone PAL) now had a second highly reliable air cargo service alternative, particularly after UPS, DHL, and TNT (PEAC) all expanded operations following the FedEx decision
- The FedEx investment represented a "stamp of quality" that indicated an attractive investment climate in the Philippines.[10]

Besides the impact of the "big four" integrators, the expansion of air service for combination cargo/passenger carriers was also beneficial. Many Taiwanese TNCs, for example, leveraged the expanded frequency and capacity of China Airlines and EVA Air for transport of goods to the next stage of production in their home country. Thus the cancellation of direct air travel between the two countries in late 1999 contributed to Acer Computer canceling plans for a major facility expansion that would have added 3,000 to 9,000 jobs and generated in excess of $2 billion in exports per year.[11] While many high technology firms came to the Philippines for other factors – including a young, low cost labor force with good English language skills – it is clear that many of these firms would not have invested had the pre-1990 air cargo service levels not changed. This is why one senior government official called the 1995 FedEx investment, "the crown jewel of the Ramos Administration's economic achievements." [12] In summary, the air cargo commercial policies pursued in the 1990s had a tangible positive impact on FDI in the Philippines.

The impact of air cargo commercial policies on employment was significant. Based on an established ratio from Kasarda (1996) of 1,000 jobs generated for every billion dollars of freight handled and total air cargo trade (imports and exports) exceeding $33 billion in 1998, it can be inferred that approximately 33,000 jobs were directly attributed to the air cargo industry.[13] The secondary impact on employment in other sectors was also notable. After FedEx's decision to locate its Asia/Pacific hub at Subic Bay, for example, over 150 firms employing more than 40,000 workers located there.[14] The impact of air cargo commercial policies on tax revenue was less pronounced than FDI. FedEx, the largest air cargo operator in the Philippines, was generating only $4 million (P155 million) per year for facility rental and landing fees at Subic Bay.[15]

On the whole, Philippine air cargo commercial policies, particularly during the Ramos administration, had a positive impact on the broader economy and created service levels that facilitated the development of the vital electronics sector. However, there were some policy decisions (figure 3.6) that appeared to curtail the notable economic benefits of air cargo service discussed in this chapter, including:

- Why did President Estrada reverse the policy of liberalization outlined in Executive Order 219?
- Why did the Philippines in 1999 insist on significantly cutting capacity with Taiwan -- its third largest and fastest growing export market and a crucial source of FDI?
- Why was an "open skies" agreement with Singapore, a crucial export market, rejected in 1997 after the precedent was established with the U.S.?

- Why did the government allow PAL owner Lucio Tan to gain control of Pacific East Asia Cargo, which led to its demise and TNT shutting down hub operations in Manila?
- Why was the government unable to build a much-needed international air cargo terminal at NAIA, which contributed to DHL's decision to move its Asian hub to Hong Kong?
- Why was an ASA with New Zealand not implemented, despite the fact that it could potentially spur trade growth by significantly cutting travel time to Latin America?

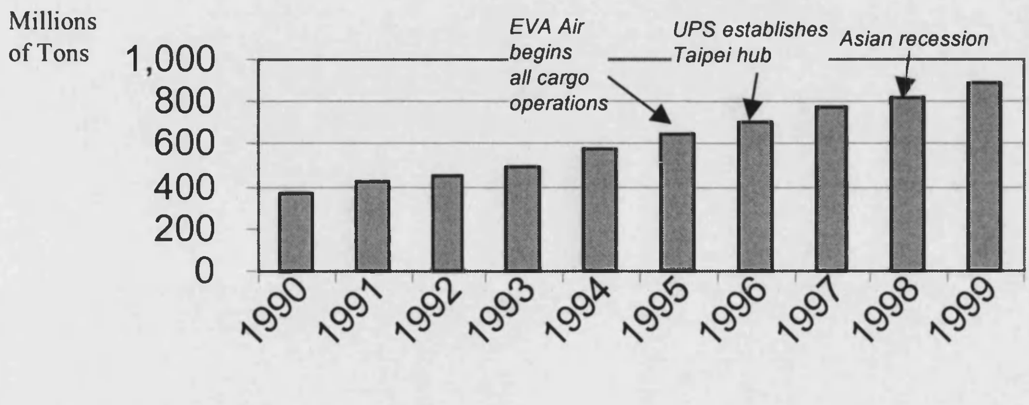
The focus of this chapter now turns to Taiwan.

Taiwan

Impact On Air Cargo Industry

The volume of air cargo shipments more than doubled in Taiwan during the study period, exhibiting near-linear growth to reach 884 million metric tons in 1999.[16] Taiwan's strong economic growth and strength in high technology exports, as detailed in the previous chapter, fueled this growth.

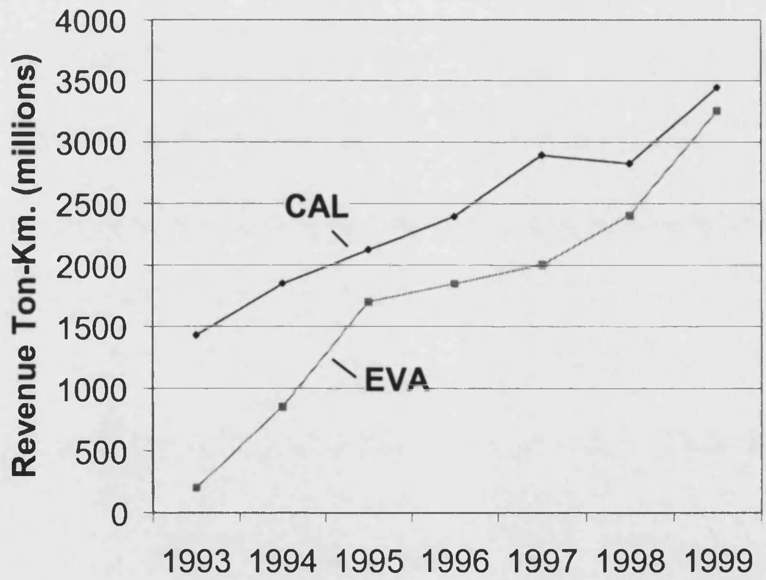
Figure 4.5: The Taiwanese Air Cargo Industry, 1990 - 1999



Source: MergeGlobal, analysis

Perhaps the most significant change was on the supply side of the air cargo market. China Airlines (CAL), which dominated the market in 1990, faced competition from not only a new domestic competitor (EVA Air), but also air cargo integrators by the end of the decade. EVA Air, which only began operations in 1991 and all-cargo flights in 1995, expanded its cargo revenue very rapidly to exceed $650 million by 1999 – 43% of the airline's annual turnover.[17] EVA's air cargo volume caught CAL by the end of the decade (figure 4.6). Despite increased competitive intensity, both carriers were profitable. The government's policy of encouraging two internationally competitive carriers was a success.

Figure 4.6: China Airlines And EVA Air Cargo Growth



Sources: CAL, EVA company reports

CAL and EVA weren't the only carriers to increase their air cargo business in Taiwan. UPS nearly doubled the number of weekly flights it operated to reach 70 by 1999; in the same year, FedEx operated more than 50 weekly flights.[18] There were also numerous high profile combination carriers that expanded service to Taiwan (figure 4.7). One factor that did not change is the dominance of Taipei's Chiang Kai-shek Airport. In 1991, it handled 95% of Taiwan's international cargo; in 1999, the comparable figure was 92.4%. The government's efforts to route more traffic out of Kaohsiung, cite of the country's other international airport, did not appear to make a significant difference.[19] However, the results of Taiwan's numerous customs reforms had a very significant effect on performance. As discussed in Chapter Three, the average speed of cargo clearance was 0.9 hours in 1999, compared to 5.2 hours earlier in the decade.[20] Overall, Taiwan's liberal commercial policies contributed to a much larger, and far more competitive air cargo industry than in the 1980s.

Figure 4.7: The Taiwanese Air Cargo Industry, 1990 and 1999

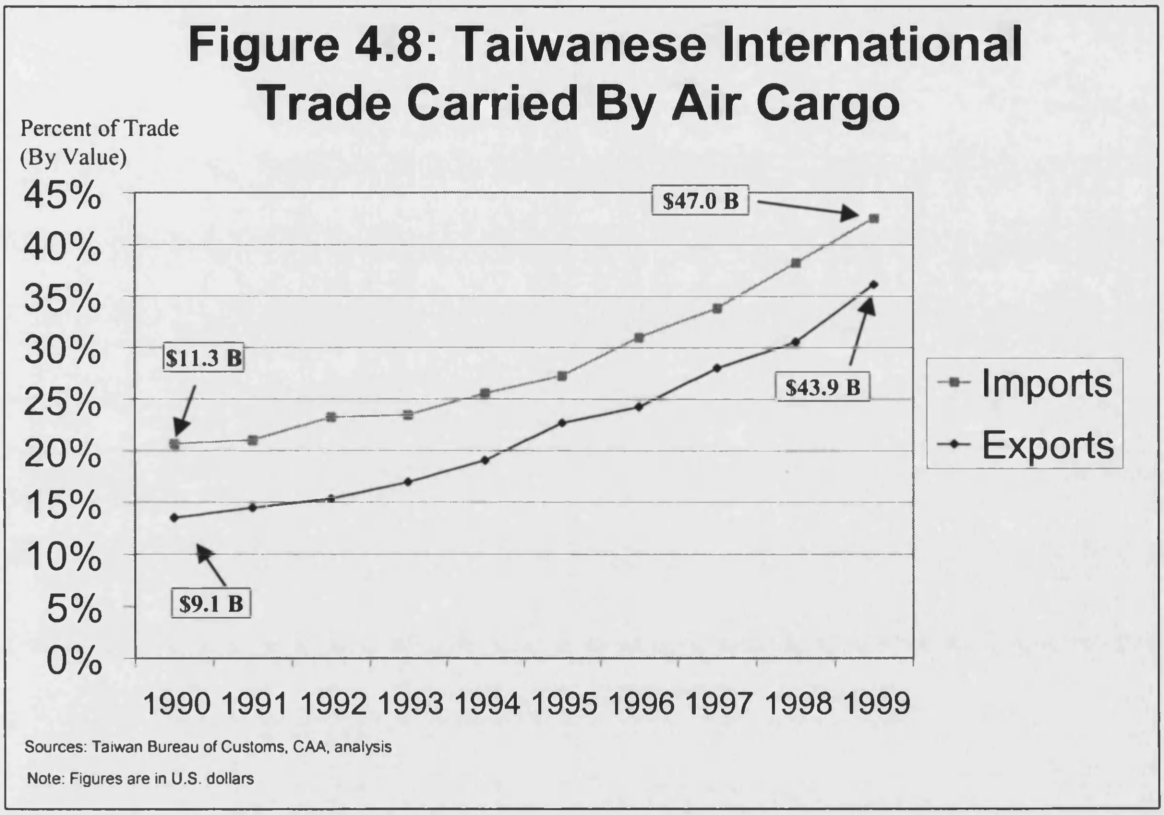
		1990	1999
International Cargo Traffic (millions of kg.)		366	884
International Cargo Airports		2: Chiang Kai-shek (CKS), Kaohsiung	2: Chiang Kai-shek (CKS), Kaohsiung
Regulation	Domestic	Recently deregulated; single dominant supplier (CAL)	Deregulated; multiple suppliers
	International	Limited international capacity – few ASA's allocated cargo rights	"Open Skies" Policy; ASAs with cargo rights with more than 20 countries
Key Air Cargo Suppliers	All Cargo & Integrated	Flying Tiger	UPS, FedEx, DHL
	Combination	CAL, Singapore, Northwest, KLM, United, Cathay Pacific	CAL, EVA, Cathay Pacific, Singapore Airlines, Qantas, Northwest, United, KLM, British Airways, Lufthansa, Air France

Note: Suppliers include only firms with own airlift capability; 1999 figures are Mergeglobal estimates.
Sources: MergeGlobal, Interviews, Analysis

Macroeconomic Impact

Trade

Taiwan experienced a significant increase in international trade carried by air cargo in the 1990s. The percentage of exports transported by air cargo increased from 14% in 1990 to 36% in 1999, while imports increased from 21% to 42% over the same period (figure 4.8). In dollars, air trade grew from $20.4 billion (U.S.) to $90.9 billion – a 350% increase.[21] Although the penetration rates were not as high as the Philippines, the use of air cargo grew substantially throughout the decade and was closing in on maritime as the international trade transportation mode of choice. One reason for the lower rate of penetration is Taiwan's more diversified export structure – electronics/information technology goods accounted for 31% of exports in 1999 versus 62% in the Philippines. A second contributing factor is limited international cargo capacity with key trading partners.



The largest export market, the United States, also had the most liberal ASA including "open skies" with 5th and 6th freedom rights and ground provisions (including self cargo handling) to allow hubbing operations for TNCs UPS and FedEx. Like the Philippines, the agreement with the U.S. was the only ASA to include provisions for ground operations. Liberal ASAs were also concluded with Malaysia and Singapore – two key trading partners and key purchasers of Taiwanese high-technology exports. These three ASAs, along with one negotiated with the Netherlands, were well aligned with broader trading patterns. However, the capacity in some other key export markets was very limited or non-existent. Hong Kong, the second largest export market, did not have a cargo air service agreement until 1996, and the agreement only allowed six flights per week per side. In contrast, Hong Kong to Kaohsiung was one of the busiest maritime trade corridors in the world. The ASA with Japan, the third largest export market, allowed only one cargo flight per week and had not been updated since 1975. Germany, the fifth largest export market, also allowed only one cargo flight per week. The Philippine ASA was abrogated in 1999 to reduce capacity, and direct flights were terminated during various periods in 1999 and 2000. And there were no direct flights with South Korea since 1992.[22] Along with these limitations was the broader issue of establishing direct air links to China. Despite the economic benefits of reversing Taiwan's self-imposed ban on flight to China and the stated objectives of the Asia Pacific Regional Operation Center initiative, this policy was not changed in the period of study. In summary, the use of air cargo as a trade facilitator grew substantially in the period of study, but air cargo capacity with some key trading partners was limited.

Figure 4.9: Taiwanese ASAs With Largest Export Markets

	1999 Exports ($m)		1991 - 1999 Exports ($m)		
Country	**Total**	**% total**	**Total Increase**	**% Increase**	**Air Cargo Air Service Agreement Activity**
U.S.	$30,900	25%	$9,155	142%	"open skies" in 1998 including 5th and 6th freedom rights and provisions for "hubbing"
Hong Kong	$26,300	22%	$17,744	307%	1996 ASA expanded capacity to 6 cargo flights/week. Only CAL and Cathay Pacific have rights.
Japan	$11,900	10%	$3,563	143%	No ASA completed in 1990s; 1 cargo flight/week authorized.
Netherlands	$4,220	3%	$2,364	227%	No ASA completed in 1990s; 11 cargo flts per week authorized per 1986 ASA.
Germany	$4,080	3%	$897	128%	1993 ASA authorized 1 cargo flight/week. Designated CAL and Lufthansa.
United Kingdom	$3,830	3%	$1,851	194%	1998 ASA included cargo for first time; 7 flts/week and some 5th freedom rights
Singapore	$3,820	3%	$1,617	173%	1995 ASA expanded capacity to 34 747's per week cargo or passenger; limited 5th freedom rights.
Malaysia	$2,850	2%	$1,747	258%	1997 ASA created unlimited capacity for 3rd, 4th, and regional 5th freedom freedoms.
Philippines	$2,610	2%	$1,799	322%	1996 ASA authorized 3 747s/week or 270 tons; 1999 "air war" shut down direct flights
Korea	$2,610	2%	$1,398	215%	Severed direct air service in 1992 after S. Korea recognized PRC; only foreign carriers fly direct.
Other	$28,517	23%	$12,302	176%	
Total	**$121,637**			**160%**	

sources: Taiwan CEPD and CAA; interviews

FDI and Employment

Net foreign direct investment in Taiwan grew substantially in the 1990s, expanding from $2.1 billion in 1990 to $3.6 billion in 1998. The largest sources of FDI were the U.S. and

Japan, which generated 24% and 15% of FDI in 1998, respectively. Approximately $25 billion in FDI flowed into Taiwan during the 1990 – 1999 period of research.[23] According to the Council of Economic Planning and Development, the air transportation portion (cargo and passenger services) of APROC led to just over $500 million in investment from January 1995 – June 1997; from July 1997 – December 2000, the CEPD estimated additional investment exceeding $1.5 billion.[24] It must be noted that the $2 billion aggregate investment figure included domestic investment in air cargo terminals (rather than FDI) and some investment for passenger services infrastructure. A qualified estimate is that total FDI in the air cargo industry was less than $1 billion over the study timeframe – less than 4% of total FDI. High visibility investments included UPS ($400 million), DHL ($30 million) and FedEx. There was also an indirect impact of air cargo service on the decisions of firms in other sectors to invest into Taiwan, particularly in high technology. Historically more than 40% of Taiwan's FDI was in the electronics and machinery and equipment sectors, the heaviest users of air cargo.[25] It is therefore likely that air cargo played an important role in a portion of the $25 billion of FDI in the 1990s, although a precise number is difficult to quantify. It is important to note that Taiwan, a major capital exporter, needed FDI much less than the undercapitalized Philippine economy.[26]

The impact of air cargo commercial policies on employment was significant. Based on the previously mentioned ratio of 1,000 jobs generated for every billion dollars of freight handled and with total air cargo trade of about $90 billion in 1999 (versus approximately $20 billion in 1990), it can be inferred that 90,000 jobs attributed to the air cargo industry at the close of the decade, an increase of about 70,000 over the period of study.[27] This figure is significant in an economy with approximately nine million jobs. The secondary impact on employment in other sectors was also significant but not quantified in this research.

Overall, Taiwan's air cargo commercial policies had a demonstrated positive impact on the broader economy under the Asia Pacific Regional Operations Center banner. Air cargo played a central role in the government's economic strategy, and key hurdles to investment and greater competition were removed while simultaneously attracting air cargo TNCs to expand operations in the country. However, there were some policy decisions (figure 3.12) that appeared to be at odds with the notable economic benefits of air cargo service discussed in this chapter, including:

- Why did Taiwan maintain a ban on direct flights to China while simultaneously proclaiming its desire to be the "operations center" of Asia?
- Why did Taiwan not agree to key demands by FedEx (cargo self-handling and 24 hour customs) that would have led to the establishment of its Asia hub in Taipei, rather than Subic Bay?
- Why didn't Taiwan drop the 1992 ban direct flights to South Korea, despite growing economic interdependence between the two countries?
- Why were ASAs with other key trading partners, including Hong Kong, Japan, and Germany, so limited in scope and capacity?
- Why did a government-linked organization maintain control over CAL and spurn a bid by Singapore Airlines to purchase 25% of the airline?

CONCLUSION

The changes in international trade and global supply chains described in Chapter Two had a significant impact on the economies of the Philippines and Taiwan. In the span of a few short years, the Philippines became a major exporter of electronics and information technology products. Along with this growth came a greater dependence on air cargo services to support international trade. In fact, nearly 60% of Philippine trade moved by air cargo – a number far in excess of the worldwide average of 34%. Furthermore, the location of an air cargo integrator at Subic Bay contributed heavily to the country's surge in FDI. Taiwan, in contrast, had a much broader industrial structure that was relatively less dependent on air cargo; approximately 40% of trade moved by this transportation mode. Yet the dependence of trade on air cargo, particularly after the initiation of the APROC initiative, accelerated in the 1995 – 2000 timeframe. This acceleration occurred despite a significant handicap: limited air service rights with key trading partners. While growth of Taiwan's air cargo industry was limited by *external* factors (e.g., de facto state status, limited air service rights), in the Philippines it appeared to be held back by *internal* factors, including lack of investment capital, inadequate competition policy, poor infrastructure, and deficient customs administration.

With air cargo policy decisions and their consequences in both countries now defined, the focus of this study now shifts to the explanatory – what factors influenced these policy outcomes? The next chapter will concentrate on the role of domestic factors on policy decisions, including the effect of domestic interests, the role of domestic institutions, and the influence of ideas/ideology on government decision-makers and advisors.

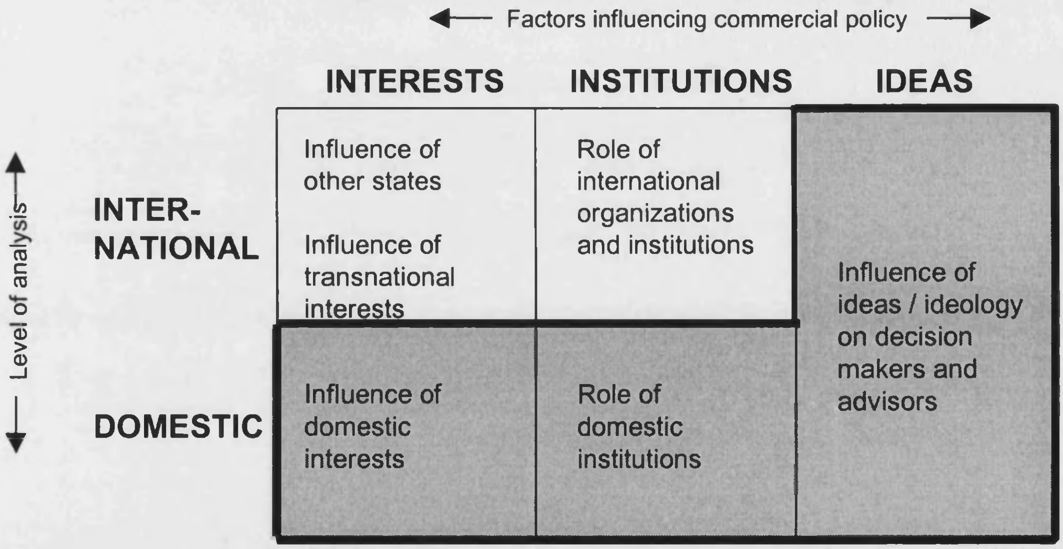
NOTES

[1] National Statistics Office (1990, 1997). Percentages are based on value of imports and exports.
[2] Cebu Pacific, the second largest domestic carrier in the late 1990s, was focused on passenger flights and did not develop a significant cargo business.
[3] Interviews.
[4] Interview.
[5] Source: National Statistics Office (1990 – 1998).
[6] According to Brandon Chen, an Acer executive, the ability to deliver fast and FedEx's direct trans-pacific. flights to the United States made Subic an attractive manufacturing site. See *The Manila Bulletin*, 10 May 2000.
[7] Button and Stough (1998).
[8] Bangko Sentral ng Pilipinas.
[9] This is an estimate based on interviews and secondary sources. It does not include investment in aircraft, which are mobile assets.
[10] Interviews; *The Manila Bulletin*, 10 May 2000.
[11] Subic Bay Development and Management Centre (1999), Interviews.
[12] Interview.
[13] Kasarda (1996), p. 54.
[14] *The Wall Street Journal*, October 4, 1996.
[15] *SBMA News Update*, 15 July 1999.
[16] *MergeGlobal* analysis; 1999 figure is estimated.
[17] *Air Cargo World*, March 2000.
[18] Sources are FedEx and UPS, cited in Council For Economic Planning and Development (1999b), p. 46.
[19] Source is Civil Aviation Authority. Percentages are based on cargo weight.
[20] Department of Customs Administration (1999), p. 12.
[21] Analysis of data provided by Taiwan Bureau of Customs and Civil Aviation Authority.
[22] Interviews.
[23] Council for Economic Planning and Development (1999a), p. 260.
[24] Council for Economic Planning and Development (1999b), p. 52. The investment figures in $NT were 17.8 billion and 51 billion, respectively. The latter figure was a CEPD estimate based on investment through July 1999. Overall, the CEPD estimates that the APROC program, including non-aviation initiatives, added 1.65% to GDP from January 1995 to June 1997.
[25] Council for Economic Planning and Development (1999a), p. 263. The 40% figure is based on FDI over the 1952 – 1998 timeframe. It is likely that FDI in electronics and machinery/equipment in the 1990s is higher than 40%.
[26] In the 1980s, Taiwan was transformed from an FDI importer to and FDI exporter. See Chi, Schive, *"Taiwan's Economic Restructuring And Its Rise In Asia-Pacific,"* in Das (1996), pp. 552 – 576.
[27] Based on employment ratio cited in Kasarda (1996), p. 54.

Chapter V: The Influence Of Domestic Factors On Air Cargo Commercial Policy

With the air cargo policy outcomes defined, this chapter will now focus on the domestic level of analysis. The objective is to understand how domestic factors shaped policy decisions in the Philippines and Taiwan. Prior to undertaking this analysis, however, a brief reflection on how the taxonomy of interests, institutions, and ideology intersects with the domestic level of analysis is in order.

Figure 5.1: Empirical Focus of Chapter Five



Interests, Institutions And Ideology In The Domestic Level Of Analysis

Domestic Institutions

Domestic institutions, the formal and informal relationships between the state and society, can also influence sectoral policy outcomes.[1] Keohane and Milner (1996) have concluded that domestic institutions can have independent effects on policy outcomes by creating rules for decision making, structuring agendas, and offering advantages to certain groups while disadvantaging others.[2] Broadly speaking, institutional constraints shape the decision-making setting through formal and informal rules. Through laws, constitutions, and less formal means such as customs and traditions, institutions create the "rules of the game" by which domestic and international interests interact with policy makers. The ability of a domestic firm to influence a policy maker might be very different in a country requiring interaction through state-sponsored business associations (e.g., Japan's Keidanren) than a country that lacks formal interaction channels with policy makers. Less formal customs and traditions, such as the acceptance of corruption, can also impact policy outcomes.

Narrowly speaking, institutional constraints can be related to the decision making structure of government. Radical sectoral reform, for example, might be easier to achieve in a state with an autocratic or parliamentary government than one with independent executive, legislative, and judicial branches.[3] Similarly, air cargo commercial policies could be influenced by the role of the lead ministry for policy formulation. It must be emphasized that institutions are not organizations per se; government organizational structure, however, can strongly influence the nature of interaction between interests and policy-makers.

Domestic Interests

The proposition that domestic interests can influence commercial policy outcomes is not new. Many air carriers had significant influence on the bargaining position of their governments in the 1944 Chicago Conference.[4] Firms, individuals, labor unions, non-governmental organizations, and even powerful individuals may have policy preferences based on the distributional consequences such as profits, jobs, or influence. Helen Milner (1997) argues that domestic interests can influence policy in two ways: first, they serve as interest groups who, through their ability to contribute campaign funds and mobilize voters, directly shape the preferences of decision makers; second, they can also play an indirect role by acting as information providers to political actors.[5] There are many domestic interests with a potential stake in air cargo policy. Clearly, air carriers are the most prominent, given the direct linkage between commercial policy and market size / profitability. As outlined in Chapter Three, Philippine Airlines (PAL), China Airlines (CAL), and EVA Airways (EVA) were among the 20 largest firms in their respective countries in 1999 and utilized government affairs functions to lobby for their interests. Other domestic firms affected by air cargo policy include freight forwarders, customs brokers, and large air cargo customers such as microelectronics firms. Sometimes firms lobby for their interests through industry associations. There are also non-firm interests with a potential stake in air cargo policy. These include issue advocacy groups, political parties, airport authorities, and labor unions. Powerful individuals can also influence policy outcomes – particularly in developing countries with fewer institutional checks and balances.

Ideas

Finally, the influence of ideas and ideology on key policy makers (and advisors) will be assessed. This extends beyond a decision-maker's macroeconomic perspective to micro-level issues that have a direct bearing on air cargo interests. Examples include:

- Are air carriers a national resource meriting government protection?
- Should foreign interests be allowed to invest in domestic air cargo firms, freight forwarders, or infrastructure?

- Is the primary mission of the customs organization to provide security and tax collection services or to facilitate commerce?

In some cases, the normative assumptions and mental models of decision-makers can be decisive in policy outcomes -- overcoming interest group lobbying or institutional constraints. As depicted in figure 5.1, ideas can originate from domestic and international sources. Peter Haas (1990, 1992) has argued that transnational "epistemic communities" which are networks for professional with policy-relevant knowledge within an issue area, can frame issues for collective debate and create new perceptions of national interests. Regardless of origin, the focus here will be the influence of ideas on national decision makers.[6]

The role of interests, institutions, and ideology are not mutually exclusive; they are often interrelated and shape one another. Institutions that provide policy makers little insulation from society may facilitate greater influence by domestic interests. Another example: the ideology of policy-makers might influence the institutional design selected for a particular sector. These secondary linkages—where they exist-- will be highlighted in the subsequent analysis.

The Influence Of Circumstances

As outlined in the introductory chapter, the influence of interests, institutions, and ideas must be considered against the backdrop of prevailing circumstances. In some cases, the onset of a crisis or an event can provide the impetus for policy reform. As John Williamson and Stephen Haggard (1994) have noted, crises can have the effect of shocking countries out of traditional policy patterns, disorganizing interest groups that typically veto policy reform, and generating pressure for politicians to change policies that can be seen to have failed.[7] Political, macro-economic, and sectoral crises may all serve as a catalyst to policy reform. The potential contribution of circumstances will be considered in the subsequent analysis.

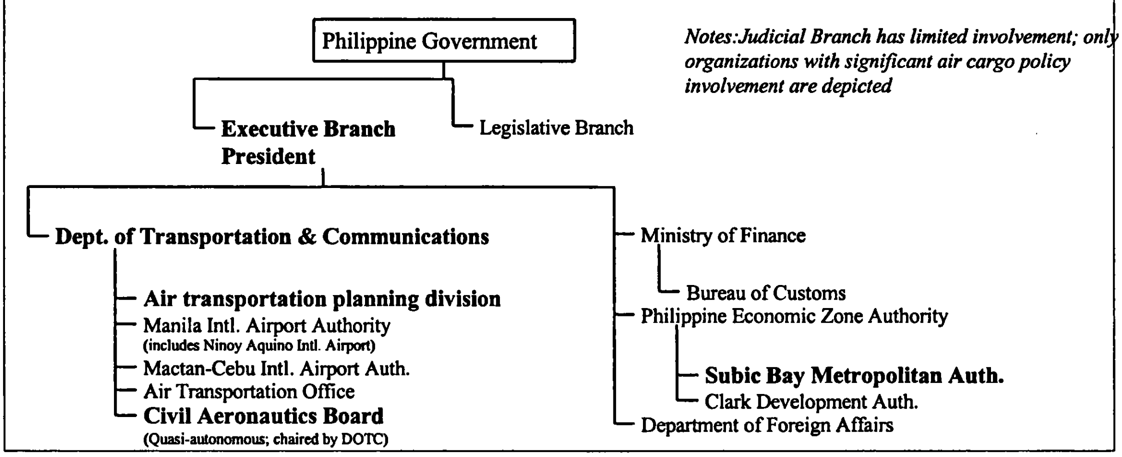
THE PHILIPPINES

Domestic Institutions

Governmental Structure

The system of government in the Philippines is modeled after the U.S. tri-cameral system. Based on the 1987 Constitution, separate executive, legislative, and judicial institutions were established. The Philippine Congress consists of no more than 250 legislators in the House or Representatives and 24 Senators. While the representatives are elected from geographically defined congressional districts, the Senators are elected at-large throughout the country. The President shares policy-making or law making power and function with the Congress and is subject to review by the Supreme Court.[8] The 1987 Constitution – partially in reaction to Marcos' abuse of executive powers – not only gave the Supreme Court unprecedented power to check legislative and executive branches of government, but also limited the president to a single six-year term.[9] A defining characteristic of the tri-cameral design is the requirement for cooperation between the executive and a majority of the legislature to pass laws related to the budget, including infrastructure.

Figure 5.2: Key Government Organizations - Air Cargo Commercial Policy
(most influential in **bold**)



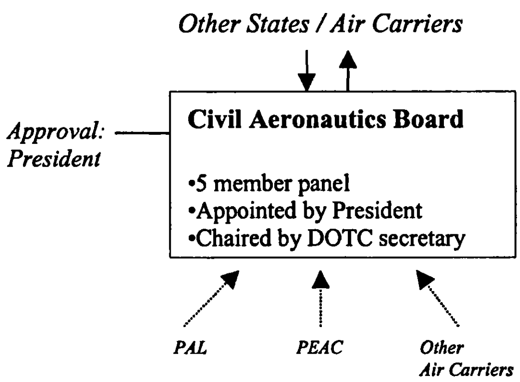
Sources: 1997 RP Civil Aviation Master Plan, Interviews, analysis

Historically, the role of political parties on macro and microeconomic policy has been minimal. Abueva (1998) concluded that Philippine political parties were loose and weak organizations of politicians whose primary task was to select and campaign for their candidates for office. The ideology of political parties was not well defined. In the 1992 elections, candidates were supported more on their personal attributes and regionalism than on their party identities.[10] By the late 1990s, Philippine political parties began to develop ideological frameworks but these did not seem to influence commercial policy decisions in a meaningful way. Congress members continued to vote more on regional interest rather than adherence to a party ideology.[11]

Air Cargo Institutional Framework and Commercial Policy

How did the Philippines' institutional framework affect rules for decision-making, help to structure agendas, and offer advantages to certain groups? In other words, what independent impact did it have on air cargo? Turning first to air service agreements, the power to conclude these agreements was concentrated in the executive branch. Executive Order 219 gave the five-member Civil Aeronautics Board (CAB) a mandate to negotiate cargo and passenger air service agreements (ASAs) subject to the confirmation of the President (figure 5.3).[12] The Department of Transportation and Communications (DOTC) secretary chaired the CAB. Although not fixed, CAB membership (appointed by the President) included representatives from the Department of Foreign Affairs, the Department of Trade and Industry, the Department of Tourism, the Department of Finance, and the private sector. Executive Order 219 specified that the Department of Foreign Affairs was to be the lead agency for initial ASA negotiations with other states; the CAB was in charge for subsequent negotiations. Designated carriers were allowed to attend negotiations with other countries.

Figure 5.3: The Philippine Civil Aeronautics Board



Sources: Interviews, Executive Order 219

Inter-ministerial coordination was often lacking in defining the national interest for ASAs. In 1997, for example, the Department of Trade and Industry (the lead trade policy organization), the Department of Transportation and Communications, and the Department Tourism independently announced support for President Ramos' open skies policy, leading to widespread confusion as to which agency was in charge for policy implementation.[13] Two years later, the Department of Finance and the Department of Trade and Industry took the lead in renegotiating an ASA in support of a protectionist aviation policy. It is interesting to note that National Economic and Development Agency (NEDA), the country's policy and economic development planning and coordinating body, did not play a significant role in coordinating aviation policy beyond infrastructure planning.[14]

The legislature's role was primarily as an observer. It did retain the ability to query the Civil Aeronautics Board regarding ASAs in congressional hearings, with the tacit understanding that it could trim the CAB's budget if it was not pleased with outcomes. One Cebu legislator introduced a bill in 1999 to open Philippine skies without effect.[15] The power to conclude ASAs was concentrated in the executive branch, particularly with the president. President Ramos appointed a pro-liberalization CAB and pursued the creation of an air cargo hub while President Estrada appointed a CAB more sympathetic to protection of PAL. The influence of the president extended beyond CAB appointments; Executive Order 219 mandated that the president must confirm (or veto) ASAs. This institutional design promoted presidential hands-on involvement in a commercial matter that was often relegated to second or third tier status in other countries. In 1999, for example, Estrada personally ordered the CAB to review air service agreements with Taiwan, Korea, Singapore; his directive flowed from PAL's request. [16] President Ramos similarly pushed for two key ASAs in 1995: one with the U.S. and the other creating open skies between the Southern Philippines and Brunei, Indonesia, Malaysia.[17] This institutional design, combined with an absence of an effective intermediary airline organization, led to frequent direct contact between the President and airline stakeholders (e.g. President Estrada and PAL owner Lucio Tan).[18] Thus, powerful personalities like Mr. Tan were sometimes able to influence policy outcomes – a common phenomenon in developing countries with an institutionally weak environment.

Both the executive and legislative branches of government influenced another key area of trade policy -- customs administration. While the leadership of the Bureau of Customs Administration (part of the Ministry of Finance) were presidential appointees, funding for customs operations and capital upgrades was approved by the legislature. Unlike air service agreements, funding was crucial for many customs policy initiatives, particularly those involving upgrades to physical or information infrastructure. The budget authority of the legislature was often decisive as it considered the Bureau of Customs' capital requirements against other potential expenditures. In 1998, customs reform legislation backed by domestic freight forwarders stalled in the Senate after that year's elections. In contrast, a 1995 initiative to automate customs operations, funded by the World Bank, was successfully implemented. For commercial policies not requiring significant capital outlay, such as providing 24-hour customs operations, the Bureau of Customs could act with more autonomy as it did in granting PEAC and FedEx 24-hour customs in the mid-1990s. Another obstacle to customs reform was corruption within the Bureau of Customs. Bribe taking was an important source of income for some customs officials, who opposed reform in processes that could harm their ability to solicit graft in exchange for priority in the queue or favorable duty valuation.[19] Corruption of customs officers and middle management was a significant impediment to successful implementation of reforms championed by Guillermo Parayno, Head of the Bureau of Customs from 1992 – 1998.[20]

An institutional change with significant impact on the air cargo sector was the Ramos Administration's expansion of special economic zones (SEZs). Inspired in part by the success of Asian neighbors, SEZs created a duty-free, business-friendly zone that was receptive to FDI.[21] An administrator appointed by the President ran each SEZ, and was empowered to negotiate business terms with investors and to manage infrastructure outside of traditional government organizations (e.g., the Department of Transport and Communication) and legislative processes. The result was increased agility and administrational effectiveness in creating a favorable environment for local firms and TNCs. The interaction between the Subic Bay Metropolitan Authority SEZ and FedEx is illustrative of this phenomenon. In 1994, the SBMA agreed to an aggressive set of terms with FedEx for locating to Subic Bay. The terms included significant airport infrastructure upgrades; provision of trained personnel; streamlined customs procedures including 24-hour operations; liberal ground handling provisions; and 5th and 6th freedom rights to support an Asian hub-and-spoke network. Furthermore, FedEx wanted all of these actions to be accomplished in just over a year -- by mid-1995.[22] The last two demands were significant challenges as they involved decision-making authority of other branches of government. SEZs did not retain authority over customs operations and were not authorized to negotiate air service agreements. An aggressive and focused SBMA team led by director Richard Gordon sprang into action by securing $40 million in financing from the World Bank to fund required infrastructure upgrades. Gordon's team also negotiated with the Bureau of Customs Administration and convinced it to establish 24-hour operations at Subic and to adopt new procedures and technology to meet FedEx's demanding requirements. Finally, Mr. Gordon and FedEx gained the support of President Ramos and the CAB to grant 5th and 6th freedom rights to FedEx, ushering in a historic 1995 liberal air service agreement with the U.S.[23] Arguably, this was the most active period for air cargo policy formulation in the period of study, and the SBMA was a chief instigator for many key policy decisions. According to former SBMA administrator Gordon:

> "When dealing with firms like FedEx, speed matters. Letting national governments handle deals won't work many times. The SBMA promised it would deliver on many key pledges and we did -- we surprised the world. I would have moved a mountain for FedEx...TNCs also need consistency, the rule of law, and transparency. The SBMA gave this to FedEx. We feel that our legal regime was one of the key reasons that they choose the Philippines rather than Taiwan."[24]

Subic Bay was not the only SEZ successfully upgrading airport infrastructure; the Clark Development Authority in Northern Luzon also upgraded facilities that included one of the longest runways in Asia. Clark and Subic were the only two SEZs in charge of their own airports, and the only two airports operating *outside* the control of the DOTC. Both were part of the Philippine Economic Zone Authority, which was directly accountable to the president.

The success of Subic Bay and Clark stand in stark contrast to the failure to upgrade Manila's air cargo infrastructure through the Department of Transportation and Communication's planning division (DOTC). In 1993, the Manila International Airport Authority, under DOTC supervision, awarded a $79 million Build-Operate-Transfer contract to build a new air cargo terminal at Ninoy Aquino International Airport to expand cargo capacity by about 500%. The terminal was badly needed, as NAIA's inadequate air cargo infrastructure was not keeping pace with surging volume and the requirements of air cargo integrators such as DHL. After six years of false starts, the project was abandoned in 1999 after the contractors were unable to garner required funding.[25] The initiative was hindered by more than just funding constraints: there was significant infighting between legislators and government agencies regarding the best location for the terminal; NAIA customs operations remained among the worst in East Asia; and government efforts to protect PAL reduced cargo traffic and increased market uncertainty. Perhaps most significant, the ill-fated terminal lost three potential "anchor tenants" in the late 1990s: PEAC ceased operations, DHL moved hub operations to Hong Kong, and UPS chose Singapore rather than Manila as a secondary Asia hub to supplement Taipei's hub operations. DHL cited lack of infrastructure as the primary reason it moved to Hong Kong.[26]

In summary, the Philippine government had weak inter-ministerial coordination for air cargo policy. The organizations with significant influence included:

- The Department of Transportation and Communications, which was responsible for infrastructure planning, airport operations, safety (through the Air Transportation Office), and ASAs (through the CAB).
- The Philippine Economic Zone Authority, which through the Subic and Clark SEZs managed airports with international linkages (and the FedEx hub)
- The Ministry of Finance, which was responsible for the Bureau of Customs
- The Department of Foreign Affairs, which participated in ASA negotiations
- The legislative branch, which approved funding for key infrastructure projects
- The Philippine President, who approved ASAs and appointed CAB members and cabinet officials

What about connections of these organizations with civil society? In this case, businesses represented the main customers of air cargo service, and government connections with civil society were widespread but not well defined. There were few effective intermediary organizations to channel industry needs to government policy makers. This fits with the argument developed by Dejillas (1996) that Philippine institutions lack clear-cut mechanisms governing the relationship between government and interest groups.[27] Like many developing countries, interactions between the government and society in the Philippines often depended on ties between personalities. This contributed to the unpredictability of some air cargo policies.

Overall, Philippine institutions had the greatest impact on air cargo policy in two areas: ASAs and infrastructure. In ASAs, the CAB was staffed with political appointees and subject to presidential meddling, which led to policy zigzags and rent seeking influence. In infrastructure, the devolution of authority to the Subic Bay and Clark SEZs facilitated significant success, while the DOTC was unable to implement a modest facilities expansion in Manila, the country's key air cargo gateway.

Domestic Interests

Philippine Airlines (PAL) was the most significant domestic interest shaping commercial policy in the 1990s, although its influence displayed ebbs and flows corresponding with presidential administrations. It had very significant influence under the Aquino (1986 – 1992) and Estrada (1998 - 2001) Administrations and less influence under the Ramos Administration (1992-1998). Like most international air carriers, PAL utilized a government affairs function to promote its policy agenda. Advocacy took place through legal challenges and media relations, as well as through formal and informal interaction with government officials.

Historically, international air service agreements (ASAs) were negotiated almost exclusively with the interests of PAL in mind. Entering the 1990s, it was the only Philippine international carrier and one of the country's largest and most respected firms. As Asia's first flag carrier, it was also a source of national pride. The Civil Aeronautics Board (CAB) –the government agency in charge of ASA negotiations – was staffed with many ex-PAL executives and was generally sympathetic to PAL's needs. In 1990, for example, the CAB negotiated an ASA to expand air travel capacity with France at PAL's behest.[28] Nineteen ninety-two was a turning point for the carrier's once-cozy relationship with the government, as PAL was privatized and Pacific East Asia Cargo emerged as a legitimate all-cargo competitor. It was also the first year of the Ramos Administration, which embraced competition and liberalization as the best approach for the aviation sector, including air cargo. As a result, PAL was opposed to six of the 18 ASAs (all liberalizing air cargo services) concluded during the Ramos Administration. Notable in this group were bilateral agreements with Singapore (1994), the U.S. (1995), Korea (1995), Hong Kong (1997), and the Netherlands (1998). Generally, PAL opposed ASAs that could benefit competitive foreign carriers, as well as those that could benefit its domestic competitors – including Pacific East Asia Cargo for cargo services and Grand Air and Cebu Pacific for passenger services.[29] This did not mean the PAL opposed liberalization *per se*; it also lobbied to liberalize air services with countries where it enjoyed competitive advantage against local carriers or could derive asymmetric benefits as a result of geography or other factors. PAL was a protagonist for successfully ASAs liberalizing air service with Thailand (1994), Japan (1996), China (1997), and Indonesia (1998).

Philippine Airlines actively lobbied the government on other commercial matters. It mounted unsuccessful campaigns during the Ramos Administration to stop FedEx from establishing a hub in the Philippines, to prevent 24-hour customs service for PEAC, and to sidetrack Executive Order 219 -- a law that embraced competition and liberalization as official aviation policy. PAL did successfully lobby to block Japanese carrier Nippon Cargo from establishing an air cargo hub in the Philippines, and to prevent "open skies" ASAs with New Zealand and Singapore. The proposed ASA with Singapore was particularly contentious, with PAL suing a member of the Civil Aeronautics Board sympathetic to open skies for allegedly accepting a bribe from Singapore Airlines.[30] After six years of diminishing influence under Ramos, PAL's influence strengthened considerably in 1998 with the Estrada Administration. Once again, the aviation policy of the Philippines embraced PAL's status as the national flag carrier and emphasized protection for its relatively weak position. The new CAB immediately reviewed ASAs it deemed unfair, which resulted in modifications to aviation capacity with Taiwan and The United Arab Emirates.[31]

FIGURE 5.4: Ramos Administration Cargo Air Service Agreements: PAL and PEAC Lobbying Positions

Year	Air Service Agreement	For	Against	Neutral/Unknown
1992	Brunei (+)	PEAC		PAL
1992	Taiwan Commercial Agreement (+)	PEAC	PAL	
1993	Hong Kong (+)	PEAC		PAL
1994	Singapore (+)	PEAC	PAL	
1994	Thailand (+)	PAL, PEAC		
1994	Indonesia (+)	PEAC		PAL
1995	US (+)		PAL	PEAC
1995	Korea (+)	PEAC	PAL	
1995	Southern Philippines-Indonesia-Brunei-Malaysia ASA (+)	PAL, PEAC		
1996	Japan (+)	PAL, PEAC		
1996	Taiwan Commercial Agreement (+)			PEAC, PAL
1996	U.K. (+)	PAL, PEAC		
1997	Hong Kong (+)	PEAC	PAL	
1997	Australia (+)	PAL, PEAC		
1997	Canada (+)	PAL		PEAC
1997	China (+)	PAL, PEAC		
1998	Indonesia (+)	PAL, PEAC		
1998	Netherlands (+)	PEAC	PAL	

Sources: Interviews, analysis, government documentation. Note: "+" designates cargo capacity liberalization; "-" designates restriction

Note: Grand Air was a protagonist for the 1996 commercial agreement with Taiwan

Pacific East Asia Cargo (PEAC) emerged as an all-cargo competitor in the final months of the Aquino Administration in 1992. As a start-up carrier, it faced daunting entry barriers including capital for aircraft and facilities, government red tape, and opposition from PAL. Perhaps the largest entry barrier was the lack of international air cargo rights. Almost all bilateral ASAs at that time did not have designation for cargo services except the U.S. agreement, and four of the five members of the Civil Aeronautics Board -- the institution responsible for negotiating ASAs -- were ex-PAL employees.[32] Despite these barriers, PEAC successfully lobbied for cargo rights to Singapore and Brunei in 1992, which allowed it to gain a small foothold in the market.[33] A new CAB appointed by President Ramos brought a more sympathetic view to competition. Soon, PEAC entered a commercial agreement with another start-up, EVA Air, and gained rights to Taiwan. In later years, PEAC was a key protagonist for liberal cargo ASAs, including Hong Kong (1993), Indonesia (1994), Australia (1997), and China (1997). PEAC's clear focus on the cargo business, which was of secondary importance to PAL, was often a decisive factor in including cargo rights in ASAs. PEAC's influence extended beyond ASAs. In 1992, it lobbied for and received from the Ministry of Finance 24-hour customs operations and its own bonded warehouse at Manila's Ninoy Aquino Airport -- the first 24-hour customs operations for air cargo in the Philippines.[34] Despite these successes and high-profile customers like Intel and Thomson, joint venture partner TNT and the company's CEO abandoned the venture when it became clear that Mr. Lucio Tan – the majority owner of PAL -- had gained effective control of the company. The airline ceased operations in 1999, effectively eliminating a significant competitive threat to PAL.[35] The government took no antitrust action government against Mr. Tan.[36]

In 1996, Lucio Tan was the richest industrialist in the Philippines, with an estimated worth of $1.5 billion. According to a survey by *Asiaweek* in the same year, he was voted the second most influential Filipino and 22nd most influential person in Asia.[37] As the majority owner and chief executive officer of PAL, he had friends in Congress, but did not get along with President Ramos. Combined with Ramos' determination to liberalize air transportation services and create competition, Tan's influence on commercial policy was limited – until 1998 when a crisis and change of administration turned the tables. The crisis was PAL's looming bankruptcy, combined with a series of labor disputes, which resulted in a cessation of operations on September 23, 1998. At the same time, Mr. Tan was a personal friend and one of the largest campaign contributors of newly inaugurated President Estrada. While President Estrada refused a government bailout of PAL, he did broker a deal that resulted in a pledge by Mr. Tan to inject $200 million (money that was deposited in a bank owned by Mr. Tan) in exchange for concessions highlighted in Chapter Three. Most notably, the Philippine government changed course in the liberalization policy enshrined in Executive Order 219. From this point on, the Philippines embarked on a course of scrutinizing and in some cases restricting air service rights for foreign carriers including a costly aviation row in 1999 with Taiwan. In the words of President Estrada, he decided to give PAL "some protection."[38] While it is difficult to separate the desire of President Estrada to prevent the failure of PAL from his desire to help his friend, it appears that a combination of Mr. Tan's wealth and his close relationship with the President strongly influenced many commercial policies.[39] The President's protection of Mr. Tan's interests resulted in charges that Marcos-style "crony capitalism" had returned to the Philippines.[40] Mr. Tan stepped down as Chief Executive Officer of PAL but retained majority ownership as of early 1999.

Freight forwarders and customs brokers were another group of domestic interests that sought to shape air cargo commercial policy, but with limited success. Most of these firms were small, unsophisticated operations with limited influence. They therefore utilized the Air Cargo Forwarders Association (ACFA), an industry association representing freight forwarders in order to advocate their interests with the government. ACFA lobbied the legislature for customs reform in the late 1990s and was successful in getting a customs reform bill introduced to Congress in 1998 that would have enhanced automation and improved government intra-agency coordination. The bill passed the House of Representatives but not the Senate, where the 1998 election stalled legislative action. As of the end of 1999, the bill still had not passed the Senate despite ACFA lobbying efforts. A senior ACFA official cited opposition by Bureau of Customs middle management as a major obstacle. ACFA also unsuccessfully challenged a 1996 joint venture between UPS and Delbros to provide freight forwarding services to the Manila and Cebu markets. Delbros was an ACFA member and one of largest freight forwarders and customs brokers in the Philippines. UPS' 60% ownership of the joint venture technically violated a law barring any foreign ownership of a customs broker, yet operations continued through the end of the study period.[41]

Another domestic interest group which emerged in reaction to the Philippine – Taiwan row of 1999 was the Freedom To Fly Coalition, a non-governmental organization (NGO) that represented Philippine air transportation consumers. The organization was founded by former Ramos Administration officials that were frustrated by what they felt was excessive damage to the Philippine economy caused by the protection of PAL. The Freedom To Fly Coalition published white papers outlining the linkage of aviation policy to economic activity and FDI. It also monitored the perceived influence of Lucio Tan. Although mostly volunteers staffed the organization, it garnered the support of Philippine overseas workers, tourism interests, and the U.S., European, and Australian Chambers of Commerce. This NGO did not emerge until the last four months of 1999, however, and was therefore more successful in stimulating public debate than tangibly affecting commercial policy during the study period of this research.[42]

Ideas

The role of ideas and ideology appeared to play a limited role in the Aquino Administration (1986 – 1992). This is not surprising – Corazon Aquino, the wife of a slain politician – was neither a professional politician nor a trained economist. She did not articulate a cohesive economic ideology and relied heavily on her cabinet and other advisors for policy suggestions; her chief political goal was the ouster of Marcos. The eclectic nature of her power base -- which included traditional politicians opposed to Marcos, businessmen, political activists, the religious, and professionals – also prevented successful policy development and implementation.[43]

In contrast, ideas may have influenced some policy decisions during the Ramos Administration. Ramos' policy framework of *democratization, devolution, deregulation,* and *privatization* was most likely influenced by the president's educational background. Ramos held a Masters in Business Administration degree from the National University of Manila and attended the U.S. Military Academy at West Point and the University of Illinois. Much of his cabinet reflected his ideological bias. One particularly influential cabinet member was General Jose Almonte, his national security advisor.[44] Despite Almonte's military background, he was an economic liberal who later founded a policy think tank. The Minister of Transportation and Communications, Jesus Garcia, was also an economic liberal.[45]

President Ramos appointed a five member Civil Aeronautics Board (CAB) that reflected his ideological biases.[46] Initial policy guidelines from President Ramos to the CAB included:

1. Dispersal of traffic away from Ninoy Aquino International Airport
2. Addition of more flights to Asian hubs such as Hong Kong and Singapore
3. Liberalization of domestic air transportation
4. Development of the Philippines as a regional air cargo hub[47]

These guidelines had an immediate impact on air cargo commercial policy. Air service agreements were finalized with Taiwan (1992), Hong Kong (1993), and Singapore (1994) designating Pacific East Asia Cargo as a second Philippine air carrier. PAL was opposed to all three ASAs, which increased competition and allowed PEAC to gain a foothold in the Asian air cargo market.[48] Facing significant criticism from PAL and its congressional supporters, the government took action to build a broader consensus of its aviation policy direction. In 1994, the Department of Transportation and Communication (DOTC) organized a convention that brought together more than 200 government policy makers and private sector interests to discuss policy reforms and possible revisions to aviation commercial policy. President Ramos also attended the convention, which was dubbed "Aviation 2000." Ramos used the occasion to call for liberalization, free entry of other carriers, and development of new international gateways. DOTC Secretary Jesus Garcia Jr. highlighted the correlation between air service and tourism, and boasted that the Philippines had increased the frequency of foreign flights by 100% since 1992; at the same time, he alluded to the difficulty of balancing the interests of PAL with those of the national economy.[49] Aviation 2000 laid the groundwork for Executive Order 219, which formalized the new aviation commercial policy direction in the following year. As outlined in Chapter Three, E.O. 219

deregulated domestic aviation, called for greater international competition, and instructed the CAB to negotiate international ASAs on the basis of "national interest" based on the needs of consumers to complement the traditional focus on air carriers.[50] The policy was tested later in 1995 when FedEx asked for liberal air service and ground handling provisions, as well as 24-hours customs as conditions for establishing its hub at Subic Bay. President Ramos made it clear that he supported FedEx, and a liberal cargo air service agreement with the U.S. was soon concluded against the opposition of both PAL and PEAC. President Ramos, however, had a strong conviction that deregulation and liberalization were in the national interest – even at the price of reduced revenue for Philippine air carriers. In an August, 1995 speech, he declared, "We in the Philippines had been left behind East Asia's growth because we mistakenly tried to protect our industries from foreign competition. We mistakenly equated political nationalism with economic self-sufficiency."[51] Executive Order 219 not only affected ASAs; it provided the impetus for privatizing PEAC in 1995 and establishing a new international gateway in the southern city of Davao.

In summary, ideas sometimes played an important role in influencing air cargo commercial policy in the Ramos Administration. As Ramos Administration CAB official commented, "The realm of ideas was key during the Ramos Administration – it help us overcome influence of interest groups. The U.S. example of deregulation gave us faith. It was only later that our policies were proved right."[52]

Although President Estrada's ideology was not part of a cohesive liberal economic framework like that of President Ramos, a few ideological themes emerge from his years as a senator from 1977 – 1990: first, he was in favor of reducing barriers to FDI; second, he was against significant import liberalization and advocated a bias for Philippine firms.[53] While on the surface these positions appear to be contradictory, Estrada seemed to be advocating greater flexibility in accepting foreign capital in areas such as infrastructure while protecting existing, viable Philippine business interests. In discussing the state of Philippine infrastructure in February, 2000, Estrada commented:

> Foreign investors can invest only up to 40% in our public utilities. So if we follow Thailand and we invest $10 billion to modernize our telecommunications, foreigners will invest $4 billion and the remaining $6 billion will be Philippine capital. That's P240 billion. Who will put up that capital? Even if you put together the Ayalas and our billionaires, we don't have enough capital. So we restrict foreigners to 40%, but we don't have 60%, we end up with zero percent. That's why we are being left behind among our neighboring countries.[54]

It is therefore not surprising that one of Estrada's first major political battles, fought in 1999, was to amend the 1986 Constitution to lift the 40% restriction on FDI. As discussed in Chapter Three, it was a battle that he lost in late 1999 to various domestic interests, including the Catholic Church and former President Aquino, that were against foreign ownership of Philippine utilities or feared he would also change other provisions of the Constitution – including the provision limiting the President to one term.[55]

As President Estrada unsuccessfully pushed for more FDI, his bias to support Philippine firms was put to the test with the PAL financial crisis of 1999. While it is clear that the role of interests (both PAL and Mr. Tan) played an instrumental role in the outcome of the 1999 PAL crisis, there was an ideological issue that may have contributed to the outcome: *is having a flag carrier in the national interest?* While the Ramos Administration was willing to allow PAL to enter bankruptcy in the name of broader economic concerns, the Estrada Administration claimed that PAL was part of the Philippine identity and critical to the national interest – even at the expense of overall economic efficiency. Thus, the Estrada Administration did not support potentially beneficial equity injections into PAL by Cathay

Pacific (Hong Kong) and China Airlines during the nadir of its crisis.[56] An Estrada Administration CAB official summed up the prevailing viewpoint when he stated, "Having a flag carrier is in the national interest. Even small countries have a flag carrier. PAL is the first airline in Asia, and PAL's demise could create a negative perception abroad."[57] Whether this statement was a smokescreen for protecting Mr. Tan's interests or an extension of President Estrada's previously stated bias for protecting domestic firms is not clear. Nonetheless, the Estrada Administration cloaked PAL protection in ideology.

The Role Of Circumstances

With the analysis of institutions, interests, and ideas complete, it is worth considering the contribution of circumstances to policy outcomes. Were there events, or crises, that contributed to air cargo policy decisions? This question will be considered at three levels: 1) political, 2) macro-economic, and 3) the air transportation sector.

On the political front, the Philippines was at peace with its Asian neighbors and during the study period; war or significant international disputes did not appear to factor into air cargo policy. Domestically, the turmoil of the 1980s associated with the ouster of President Marcos had largely boiled over by the 1990s. There was a political problem with a secessionist movement in Mindanao that most likely contributed to President Ramos' support of the Davao International Airport Project in 1998 as well as the 1995 open skies agreement between the southern Philippines, Indonesia, Brunei, and Malaysia. Both of these policies were aimed at enhancing economic growth in the destitute Mindanao province.

There did not appear to be any economic events or crises that had a major influence on air cargo policy outcomes. The 1990s – particularly after the 1992 election of President

Ramos -- were a period of steady economic growth and expanding international trade. The most significant economic event during the study period was the 1997/1998 Asian recession, which did not appear to guide any important cargo policies.

While there was not an economic calamity, there was a crisis in the aviation sector with the temporary shutdown of PAL in 1998 due to impending bankruptcy. This event highlighted the economic dependence of the Philippine economy on air service: many international flights were lost and domestically many communities that were served only by PAL were left with maritime transportation links. The political cost of letting the situation persist was severe. Given these circumstances, in the words of a CAB official, "President Estrada did not want to be the President who had Philippine Airlines fail during his administration."[58] This crisis most likely contributed – along with President Estrada's links to Lucio Tan – with the major protectionist policy shift in 1998.

TAIWAN

Domestic Institutions

Governmental Structure

The organization of Taiwan's government is unique in the international system. Gerald McBeath (1998) offers one point of view why it is unique:

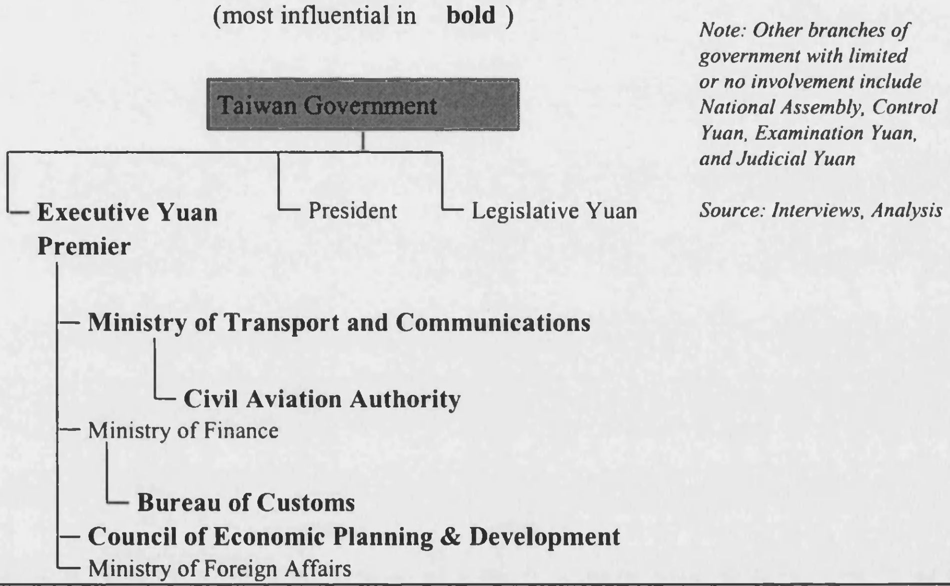
> The Republic of China is a republican and unitary state. The republican credentials of the state date back to the 1911 revolution, which brought down China's last dynasty, the Ch'ing. In the 1947 constitution, republicanism was expressed in the "five-power constitution," the apparent invention of Sun Yat-sen. Three of the powers or branches are based on the American system of separated power: Executive Yuan, Legislative Yuan, and Judicial Yuan. The other two branches – Examination and Control (censorial) – are drawn from Chinese tradition. These five branches, together with the president and National Assembly, form the seven primary institutions of the state in Taiwan. Throughout Taiwan's modern history, the most important, however, have been the president and Executive Yuan.[59]

The president's powers are extensive within this system. He is chief of state, concludes treaties, and convenes the national assembly. He also has extensive powers of appointment, including the power to appoint the premier of the Executive Yuan, and key members of the Control, Examination, and Judicial Yuan (with the consent of the national assembly).[60] Until the first direct election in 1996, the National Assembly appointed the president.

The Premier heads the Executive Yuan and supervises the operations of all its agencies, countersigns laws and decrees proclaimed by the president, and directs relationships between the Executive Yuan and Legislative Yuan. The Executive Yuan consists of eight ministries (including interior, foreign affairs, national defense, finance, education, justice, economic affairs, and transportation and communications) and 19 commissions, including the Council for Economic Planning and Development and the Fair Trade Commission (responsible for antitrust enforcement).[61] The heads of the ministries and commissions, along with the Premier, Vice Premier, and a half dozen ministers of state compose the Executive Yuan Council or cabinet. In 1997, there were 38 cabinet-level officials. The President appoints the members of the cabinet on recommendation from the Premier. The large numbers of councils and commissions makes policy coordination imperative and this is achieved through the cabinet's secretariat, the CEPD, and task forces.[62] As outlined in Chapter Three, the CEPD is responsible for coordinating national economic planning and is in charge of the APROC initiative. The Ministry of Economic Affairs is the lead trade organization.

The Legislative Yuan consists of 225 members, elected by direct vote since 1992. Because the Executive Yuan initiates most proposals and changes in law, the role of Legislative Yuan is largely reactive. The opportunities for legislative oversight come in two areas: 1) twice a year, ministers must appear before the Legislative Yuan to make reports and answer questions from legislators, and 2) budget oversight—which requires the Executive Yuan to submit budgets three months in advance. The constitution does not allow the Legislative Yuan to increase the budget, but it can approve or reduce proposed expenditures.[63]

Figure 5.5: Key Taiwan Government Organizations: Air Cargo Commercial Policy
(most influential in **bold**)



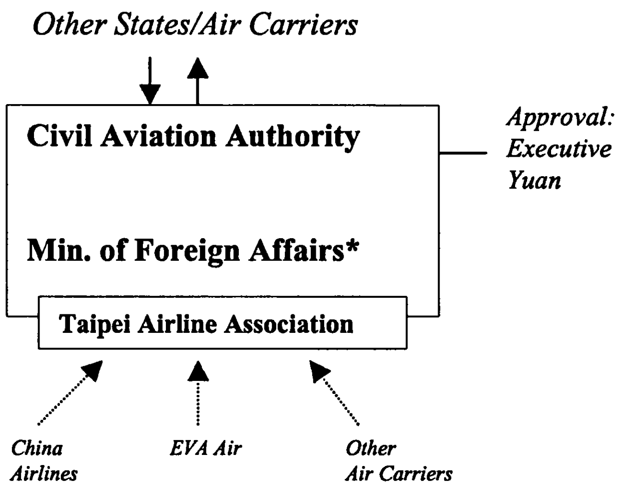
The powers of the remaining four branches of government are relatively narrow. The National Assembly is a limited-purpose parliamentary body that lost its power to elect the president and vice president in 1994. Its remaining substantive policy is to amend the constitution and confirm certain presidential nominations. The Examination Yuan is responsible for the examination, employment, and management of all civil service personnel. The Judicial Yuan is the highest judicial organ in Taiwan and is responsible for all courts and their administrative agencies. Finally, the Control Yuan is a quasi-judicial organization whose chief function is to institute impeachment proceedings against public officials.[64]

The role of party politics is crucial in understanding political economy in Taiwan. Here the Kuomintang (KMT) — the country's dominant political party -- used an interlocking directorate between political and government organizations to maintain significant leverage over key policy proposals and even the selection of cabinet ministers. In 1997, for example, 37 of 38 cabinet members were members of the KMT.[65] In the Legislative Yuan, however, election of opposition party members (in particular Democratic Progressive Party members) beginning in 1992 made this institution more independent of KMT policies and less of a rubber stamp institution to the Executive Yuan. Although the KMT was to lose power to the Democratic Progressive Party in early 2000 elections, it was firmly in control of the government throughout the 1990 – 1999 study period.

Air Cargo Institutional Framework and Commercial Policy

Evidence suggests that Taiwan's institutional framework had an independent effect on many policy outcomes, including ASAs, customs reform, FDI, and infrastructure. Turning first to ASAs, Taiwan's institutional design was modified to promote competition and avoid domination by CAL. Two organizations had responsibility for negotiating ASAs: the Civil Aviation Authority (part of the Ministry of Transportation and Communications) and the Ministry of Foreign Affairs (Figure 5.6). Generally, the international affairs specialists within the Civil Aviation Authority took the lead in negotiations with the Ministry of Foreign Affairs participating to ensure congruency with broader economic and political objectives. Prior to 1992, individual air carriers (usually CAL) were also allowed to participate in negotiations. With the emergence of EVA, however, the CAA changed its system to ensure equitable representation at negotiations in 1992 by creating the Taipei Airline Association

Figure 5.6: Organizations Responsible For Taiwan's Air Service Agreement Negotiations



* Note: TECO leads negotiations with states lacking official diplomatic recognition
Source: Interviews

(TAA). The TAA was an intermediary organization that represented the interests of Taiwanese air carriers in ASA negotiations (rather than individual carriers). With many ASAs designating only one carrier per country, the TAA did not know which of its member air carrier(s) would ultimately receive air route authority as a result of the negotiations. Once an ASA was signed off by the CAA or Ministry of Transportation and Communications, the Ministry of Foreign Affairs, and the TAA, it was then sent to the Executive Yuan for approval. Neither the President nor the legislature was involved in the approval process, although the Legislative Yuan could challenge specific outcomes during its biannual review of Executive Yuan policies. Only after approval did the CAA award rights to a specific carrier. While the mechanics of ASA development in Taiwan were not appreciably different from many countries, the advent of the TAA served to level the playing field for international route development for CAL and EVA and facilitate the government's objective of creating two strong, internationally competitive carriers.[66] Examination of air cargo ASAs completed in the 1992-1999 timeframe indicates a fairly even balance in international route authority between the two airlines.[67] Air cargo revenues were also balanced between the two carriers. The TAA also had another effect on ASA outcomes: it created a focus on the needs of the Taiwanese air cargo industry rather than particular carriers. This consensus-driven approach helped to deter rent-seeking activity.

The Ministry of Finance administered Taiwan's reforms in another area of commercial policy, customs administration. A key catalyst for these reforms was the CEPD, which included customs reforms as a key element of the APROC plan. The CEPD wielded significant influence with the Premier and the President, and used this power base to pressure the Bureau of Customs to rapidly institute reforms – particularly the move to 24-hour customs in 1995. Frequent meetings were held with the Bureau of Customs from 1995 – 1999 to monitor progress. In addition, the CEPD actively pursued the entry of air cargo TNCs into Taiwan to educate customs officials and facilitate implementation of world-class customs practices.[68] The influence of TNCs on customs reforms will be discussed in Chapter Five.

Interministerial coordination by the CEPD was also a catalyst for many of the FDI and industry policy reforms outlined earlier in this chapter. While ideology under the APROC banner spawned many policy initiatives, CEPD institutional power created the impetus for actual policy implementation. Two factors contributed to its institutional power. First, an interlocking directorate between the President, the Executive Yuan, and the KMT throughout the 1990s ensured that the key decision-makers were generally operating in unison. Premier Vincent Siew, for example, was a former chairman of the CEPD and considered passage of APROC as a top priority of government.[69] The second source of the CEPD's institutional power was derived from its relative insulation from domestic interests. CAL and EVA were not formally consulted about the air cargo portion of APROC until the plan was already in motion. Similarly, domestic interests were unable to mount much of a challenge to the CEPD's plans for freight forwarding services liberalization. A comment by a senior CEPD official sums up the distance with domestic interests: "We offered liberalization of ground service as a carrot to CAL and EVA -- they couldn't be for liberalization of ground services and against air liberalization."[70]

While the CEPD enjoyed solid support from the President and Executive Yuan, this did not guarantee successful implementation. Mid-level bureaucrats – the people in charge of actually implementing the new laws – could sabotage or considerably slow down reform. To offset this threat, the CEPD set up a "training camp" for bureaucrats in 1994-96 to enhance support for APROC. Another obstacle was the Legislative Yuan, which could reduce key APROC line items in the budget. Here, the CEPD made 30 presentations to 5,000 assistants of legislators to get their buy-in.[71] Overall the CEPD placed the air transportation reform high on its six-pillar APROC agenda. According to a senior CEPD official, telecommunications reforms were the first priority, followed by air cargo and then media. The reasoning was that telecommunication reforms would be popular with the public, which could generate momentum to implement more difficult reforms.[72]

Finally, Taiwan's lead ministry for trade policy formulation and negotiation, the Ministry of Economic Affairs, had limited involvement air cargo commercial policy matters. Its chief involvement was in coordinating customs reform and participating in WTO accession negotiations that lead to liberalizing some FDI restrictions.

In summary, the government organizations (figure 5.5) with significant involvement in air cargo commercial policy included:

- The Ministry of Transport and Communications and the Civil Aviation Authority, which were responsible for international air service agreements, infrastructure management, domestic regulation, and air safety
- The Bureau of Customs, which managed customs administration
- The Council of Economic Planning and Development, the country's policy planning and coordination body, which conceived the APROC plan and coordinated its implementation
- The Ministry of Foreign Affairs, which handled official state-state air service negotiations and provided direction to the Taipei Economic and Cultural Office (TECO) for unofficial negotiations with states that did not recognize Taiwan
- The Executive Yuan and Premier, which oversee operations of governmental ministries, approve ASAs, and initiates legislative proposals
- The President, who acts as the head of state, appoints cabinet officials, and occasionally gets involved in high-level policy issues
- The Legislative Yuan, which approves budgets and provides legislative oversight

Overall, there appeared to be good policy coordination between these organizations, particularly those that were part of the Executive Yuan. The CEPD facilitated much of this interministerial coordination through the APROC initiative, although it did not get involved with air service agreements, which were handled by the CAA and Ministry of Foreign Affairs. The creation of an intermediary organization, the TAA, ensured coordinated input from domestic interests for ASAs, limiting direct bilateral contact and rent seeking behavior.

Domestic Interests

The key domestic interests involved in Taiwan's commercial policy development were its two principal air cargo firms, China Airlines (CAL) and EVA Air (EVA). The focus of their lobbying was primarily ASAs. The logic for their involvement was straightforward: with the vast majority of their revenues coming from international routes, and a significant portion (about 40%) of this revenue derived from cargo, ASAs went a long way in determining the growth and financial viability of these firms. It is therefore not surprising that a majority of the ASAs were negotiated at the behest of these domestic interests. Taiwan's status in the international system as a *de facto state* added an interesting twist to ASA development: if the other country did not have official diplomatic relations with Taiwan, CAL and EVA were encouraged to first negotiate desired air routes with appropriate air carrier(s) in the other country. If the parties were able to reach an agreement, then the Taipei Economic and Cultural Office (TECO) was brought into the negotiations. TECO was Taiwan's unofficial organization for handling trade and commercial matters with states lacking official diplomatic recognition. As a result of this arrangement, Taiwan's carriers were often asked to play a diplomatic role in expanding air links with other states.[73]

CAL had two primary objectives in seeking to influence ASA development in the 1990s: to expand its international air cargo business, and to fend off the challenge of new entrants – principally EVA and TNCs such as UPS and FedEx. It was more successful in the first endeavor – the number of countries that CAL served grew substantially during the decade as its cargo revenue more than doubled. Expanding air routes to Europe was a key market focus. CAL successfully pushed for ASAs with Germany (1995) and Luxembourg (1997) to complement its existing rights to the Netherlands from a 1986 agreement (figure 5.7). CAL also lobbied – along with EVA -- for air cargo rights to France, but the Taiwan Civil Aviation Authority designated EVA as the authorized carrier for these routes. In the Middle East, CAL successfully pushed for a liberal ASA in 1995 with Abu Dhabi that provided a stopover point for long-haul routes to Europe. Southeast Asia was another region receiving focus during this timeframe. CAL was a protagonist for liberal ASAs with Indonesia (1995), Vietnam (1995), and Thailand (1999). The Vietnamese routes were particularly liberal and gave CAL the right to fly Taipei - Ho Chi Minh – Europe routes. CAL also had a number of successes in expanding air rights to the ever-important U.S. market. The ASA negotiated in the late 1980s had authorized CAL to fly to six U.S. cities. In 1993, against the wishes of the CAA (which feared the U.S. might want to re-negotiate the ASA), CAL applied unilaterally to the U.S. Department of Transportation under a "temporary exclusion" clause to initiate flights to Chicago. The tactic was successful, and CAL later used the same approach to gain direct service to Atlanta and Miami.[74] The net result of international route development activities was that by 1998, CAL operated 32 international cargo flights per week allocated as follows:

- Trans-Pacific flights per week to the U.S.
- Six weekly European flights to Amsterdam and Luxembourg (via Penang, Bangkok, Kuala Lumpur, and Abu Dhabi)
- Nine flights to Southeast Asia
- One weekly flight to Tokyo[75]

EVA Airways began its air cargo business from scratch in the early 1990s and placed great emphasis on developing a global network. Two early successes were ASAs with New Zealand and Australia in 1991, which were influenced by EVA lobbying. Valuable air cargo rights to Europe were also secured, including France (1993), Belgium (1995), and Britain (1998). Although not an explicit government policy, there appeared to be an attempt to "level the playing field" for international cargo rights between CAL and EVA. Thus EVA was awarded routes to France and Britain to offset CAL's routes to the Netherlands, Luxembourg, and Germany. EVA's efforts were helped by the government's pro-competition bias. Thailand (1998) was another ASA where EVA was a key protagonist. EVA's efforts in pushing the government to expand air service rights yielded significant commercial benefit. Cargo revenue grew at a 50% annual rate and by 1999 reached $665 million – 43% of overall revenue.[76] In less a decade from its inception, EVA caught the dominant state carrier, CAL, in cargo revenues.

While CAL and EVA were generally pushing for liberalized air service rights, there were a few notable exceptions: the U.S. and Singapore. Both carriers, with CAL the most vocal opponent, opposed the 1998 U.S. "open skies" agreement that cleared the way for UPS' hub in Taiwan. While the two domestic interests were not successful in stopping the U.S. "open skies" agreement, they did play an important role in preventing a similar arrangement pushed by Singapore in the late 1990s. The common fear was that Singapore Airlines would use 5th freedom rights to capture lucrative Taiwan – North America routes, thus damaging the business base of CAL and EVA. An EVA executive captured the prevailing sentiment when he stated, "EVA supports open skies—except for Singapore."[77] This concern was enough to convince the Civil Aviation Authority (CAA) to deflect Singapore's overtures, despite the CAA's own 1995 "open skies" policy.

Figure 5.7 Taiwan's Cargo ASAs And Commercial Agreements: CAL and EVA Lobbying Positions

Year	Air Service Agreement	For	Against	Neutral/Unknown
1990	Dubai (+)	EVA, CAL		
1991	Brunei (+)			CAL, EVA
1991	Australia (+)	EVA		CAL
1991	New Zealand (+)	EVA		CAL
1992	Bulgaria (+)			CAL, EVA
1993	Germany (+)	CAL		
1993	France (+)	CAL, EVA		
1993	Maldive Island (+)	EVA		
1995	Singapore (+)		CAL and EVA (against open skies-drove compromise)	
1995	Vietnam (+)	CAL, EVA		
1995	Panama (+)	EVA		CAL
1995	Abu Dhabi (+)	CAL		EVA
1995	Switzerland (+)			CAL, EVA
1995	Belgian (+)	EVA		
1995	Indonesia (+)	CAL, EVA		
1996	Philippine (+)	CAL, EVA		
1996	Hong Kong (+)	EVA		CAL
1997	Luxembourg (+)	CAL		EVA
1997	Malaysia (+)			CAL, EVA
1998	USA (+)		CAL	EVA
1998	Australia (+)	CAL, EVA		
1998	Britain (+)	EVA		CAL
1999	Palau (+)			CAL, EVA
1999	Thailand (+)	CAL, EVA		

Sources: Interviews, analysis, government documentation. Note: "+" designates cargo capacity liberalization; "-" designates restriction

Other domestic interest groups played a secondary or tertiary role in influencing air cargo commercial policy. Small domestic carriers such as Far East Air Transport or UNI Air had a small number of international routes and limited political influence. Domestic freight forwarders and customs brokers were fragmented, weakly organized, and had limited political influence. The same was true of labor unions, issue advocacy groups, and non governmental organizations. Finally, the largest air cargo customer group – Taiwan's powerful electronics firms -- did not actively lobby on air cargo policy matters.[78] The traditional pattern in most countries of linking ASAs with the needs of major domestic carriers that began with the 1944 Chicago Convention was alive and well in Taiwan in the 1990s.

With the exception of ASA development, domestic interests did not play a major role in Taiwan's air cargo commercial policy. Domestic interests were not the initiator of the Asia Pacific Regional Operations Center initiative, did not push for customs reform, and were not able to prevent entry of UPS into Taiwan. In most cases, domestic interests were kept at arms-length by strong, centralized Taiwanese institutions within government.

Ideas

In contrast to the secondary role played by domestic interests, the role of ideas was prominent in Taiwan. The primary reason for this was the significant impact of the Asia Pacific Regional Operations Center (APROC) initiative on air cargo commercial policies, particularly for the industry and FDI policy categories. The key elements of APROC related to air cargo were outlined in Chapter Three.

APROC originated largely from the realm of ideas. According to the former chairman of the Council for Economic Planning and Development (CEPD), Vincent Siew:

> "The plan was instituted in the face of a changing domestic and international environment. Domestically, due to the sharp appreciation of the NT dollar caused by the trade surplus, Taiwan's labor-intensive industries had begun to relocate to Southeast Asia and China since the mid-1980s. Also, foreign investment in Taiwan had declined substantially. To cope with these unfavorable situations, we had to rethink our economic policy…the idea of the APROC plan – with a feasibility study by Paul Hsu, senior lawyer of Lee and Li Attorney at Law, and Professor Chi Schive, former Chairman of the Department of Economics and National Taiwan University – was fully supported by academic groups. McKinsey & Company then completed more comprehensive research, which set the main features of the plan in motion." [79]

The plan was formally adopted in January, 1995. Siew left the CEPD to become Premier of the Executive Yuan and Professor Schive – one of the authors of the feasibility study – became Vice Chairman of the CEPD and one of the key government officials in charge of APROC's implementation. The plan put significant emphasis on the free movement of "the four I's" that support commerce – investment, industry, individuals, and information. Becoming an air transportation hub was one of six pillars of the plan, with most of the near-term emphasis on becoming an express air cargo transit hub. There were two reasons for the air cargo emphasis, according CEPD Vice Chairman Schive: "First, Taiwan was ideally located to be an air cargo hub. Second, with the fragmentation of production there was an imperative to provide lower cost, integrated air cargo services. By becoming an express air cargo hub, we could improve our service levels and lower our costs." As a trained economist who had researched just-in-time supply systems and the globalization of production, Vice Chairman Schive displayed a sophisticated understanding of the air cargo industry, including the distinction between the freight and express market segments. He therefore discounted the competitive threat posed by an integrator to the business prospects of CAL and EVA, which were focused on the freight segment of the market.[80] The original 1995 blueprint for becoming an express air cargo transit hub included the following elements:

- Creation of a special area for express cargo operations at CKS International Airport, served by a fully updated operating system for customs clearance
- Allocation exclusive areas within CKS for international express cargo operators, with the capability of installing and operating their own high-efficiency equipment.
- Privatization of ground services at CKS international and allowing competition with a second operator.

- Expansion of the CKS air cargo terminal, including an expansion of express cargo handing capacity.
- Privatization and corporatization of the CKS air cargo terminal.
- Assistance to domestic operators in developing integrated express transportation services.[81]

The 1995 blueprint made it clear that upgrading and privatizing Taiwan's air cargo infrastructure and supporting services was a top priority. Judged against the key air cargo objectives of the plan, APROC was very successful: CKS cargo facilities were expanded and privatized, ground services were privatized, and customs procedures were updated and modified. The 1995 blueprint also emphasized the importance of attracting one of the "big four" integrators to establish a hub in Taiwan. According to CEPD Vice Chairman Schive, "We needed one of the "big four" integrators to make the air cargo portion of APROC work."[82] The CEPD also achieved this objective by attracting UPS to establish its primary Asian hub in Taipei in 1996.

The CEPD and Executive Yuan initiated a second stage of APROC in 1997, with 67 bills selected for adoption by the Legislative Yuan. A few of these bills were focused on aviation, including increasing foreign ownership of airlines to a maximum of 50%, rationalization and reduction of airport fees, and development of an "air city" around CKS International Airport. Some of these objectives were adopted -- a "Taoyuan Air City Plan" for CKS Airport was completed, aircraft registration fees were cut by 99%, and landing fees were reduced by 25%. The most significant failures for the CEPD were the inability to pass laws securing 100% foreign ownership for ground handling, freight forwarding, and aviation infrastructure services and increasing foreign ownership of airlines to 50%. These failures aside, it is clear that ideas were an important factor driving the APROC initiative. The professional and educational backgrounds of key policy makers may have contributed to the spotlight on liberal economic ideas. The CEPD was an organization laden with economists, President Lee was a trained economist, and over the 1980 – 2000 timeframe either the Premier or Vice-Premier of the Executive Yuan had an economics background.[83]

The realm of ideas appeared to play a secondary role to interests in the development of international ASAs. Here, the Ministry of Transportation and Communications (MOTC) was in charge of policy development, with the Civil Aviation Administration (a bureau of the MOTC) responsible for negotiating ASAs and implementing policy. In 1995, following an APEC summit, MOTC Minister Liu announced an "open skies" policy for Taiwan, which included unlimited 3^{rd} and 4^{th} freedom rights and 5^{th} freedom rights on a "reciprocal" basis. In reality, the term "reciprocal" indicated that the agreement had to be acceptable CAL and/or EVA. The new policy was put to the test by the major Asian "open skies" proponent – Singapore – in 1995. Singapore proposed unlimited 5^{th} and 6^{th} freedom rights with Taiwan, an approach that would have allowed Singapore Airlines, its national carrier, to target the Trans-Pacific cargo traffic of CAL and EVA. With few attractive 5^{th} and 6^{th} freedom routes through Singapore, both carriers were opposed to Singapore's proposal. In the end, Taiwan agreed to a limit of nine intercontinental 5^{th} and 6^{th} freedom flights per week in exchange for increasing the total capacity for cargo and passenger flights between the two countries to 34 747's (or equivalent) per week.[84] Its air cargo carriers had been protected; interests trumped ideas and ideology in this instance. It is also important to note that the MOTC's "open skies" policy did not apply to air links with mainland China. Here, national security concerns and Taiwan's self-imposed ban on mainland transportation links reigned, despite the contention by critics (including the European and American Chambers of Commerce) that Taiwan could not become an Asia Pacific Regional Operations Center without transportation links to China. While the "open skies" proclamation was influenced by the liberalization bias of Taiwan's policy elites, the primary catalysts for specific bilateral remained domestic (and in some cases, international) interests. The role of international interests will be explored in Chapters Five and Six.

The Role Of Circumstances

Taiwan did indeed face a crisis during the study period – the latent political and military threat from the Peoples Republic of China. This, combined with its status as a *defacto state*, contributed to its desire to liberalize air transportation links and increase economic interdependence with other states – particularly with the U.S., its chief military ally in the region. Economically, the 1990s were a period of robust economic growth for Taiwan with the exception of the 1998 Asian economic crisis, which had less relative impact on Taiwan than many other Asian countries. Taiwan's economy continued to grow throughout the crisis. However, there was a significant trade surplus that had contributed to a sharp appreciation of the NT dollar and less competitiveness in labor-intensive industries. Combined, Taiwan's political and economic circumstances provided an environment where the Asia Pacific Regional Operation Center initiative and WTO accession could be pursued by a cohesive national government. Indeed, greater political and economic interdependence with outside world was a national priority. Without these circumstances, domestic interests opposed to reform and liberalization would probably have exerted more influence on air cargo policy outcomes.

There did not appear to be any sector-specific crises that drove policy outcomes although the decision to privatize CAL may have been aided by a few well-publicized airplane crashes that resulted in significant loss of life.

COMPARISON OF THE PHILIPPINES AND TAIWAN

Domestic Institutions

There were significant differences in the domestic institutions of the Philippines and Taiwan that had important ramifications for policy outcomes. Overall, Taiwanese government organizations were better insulated from domestic interests and had fewer, more focused connections with non-government groups than their Philippine counterparts. The largest institutional contrasts were in three areas: the involvement of the government's lead economic planning agency, application of competition policy, and negotiation of international air service agreements.

The first contrast was in the role of the lead economic planning organization, and its role in linking air cargo sectoral reforms with the broader economy. Taiwan's CEPD was organized and effective, while the equivalent Philippine organization – the National Economic and Development Authority (NEDA) – had minimal involvement with air cargo policies. Taiwan's APROC initiative highlights this contrast, where the CEPD developed and published an air cargo policy agenda (and its underlying economic rationale), worked with other government agencies to develop specific reforms and laws, educated where necessary, monitored results, and communicated progress to the public. The CEPD's influence made it a primary conduit for policy reform input from domestic interests – which were usually held at arms-length. With the exception of ASAs, the CEPD had involvement with almost every facet of air cargo commercial policy and was an important catalyst for many reforms that were the domain of other government organizations such as the Ministry of Finance (customs) and the Ministry of Transportation and Communication (infrastructure). Moreover, the alignment of the KMT, the President, the Premier, and the Executive Yuan (including the CEPD) during the study period decreased political friction and increased the probability of policy implementation.

In the Philippines, NEDA was formally responsible for economic policy analysis, formulation, and coordination; public investment programming; and monitoring. While NEDA enjoyed significant influence under President Marcos (where it funded some unsuccessful projects), its influence waned under President Aquino.[85] Despite attempts by President Ramos to revive NEDA's influence, it did not play an active role in developing a cohesive aviation sector reform agenda (like APROC) or in linking reforms with broader macroeconomic objectives. Lacking a strong central coordinating body, Philippine air cargo commercial policy was left to numerous overlapping and sometimes incompetent government organizations. Department of Transportation and Communication, for example, had nine different leaders under Aquino and Ramos and lacked project finance skills necessary to manage build-operate-transfer projects.[86] This made significant policy reform through traditional institutions very difficult. The unsuccessful efforts to expand air cargo infrastructure in Manila are illustrative, and stand in stark contrast to the relative success of Taiwan in upgrading CKS' air cargo infrastructure. It is not surprising therefore that the most significant progress in air cargo infrastructure (the Subic Bay Special Economic Zone) took place *outside* of Manila and traditional government organizations and institutions. Of the three Philippine presidents, Ramos made the greatest effort to tackle the institutional barriers holding back aviation policy reform. The most visible attempt to forge consensus was his "Aviation 2000" conventions held in 1994 and 1997 that included more than 200 representatives from the government, domestic interests, TNCs, academia, and the press. Achieving a consensus with such a wide array of domestic interests was difficult, and most of the objectives of the convention were not achieved. However, the 1994 convention did lay the groundwork for Executive Order 219, which liberalized the air cargo sector in 1995. In contrast, Taiwan's CEPD could press for reform with government officials out of the public spotlight. Rather than dealing with many competing interest groups in a public forum, the CEPD could leverage institutional power and KMT party linkages to press key government agencies for reform.

A second institutional contrast was related to competition policy. In the Philippines, the lack of established antitrust precedent or central competition authority allowed Lucio Tan to take control of an emerging Philippine air cargo supplier, Pacific East Asia Cargo. The merging of the two major domestic air cargo carriers raised an obvious antitrust issue that fell under the jurisdiction of the Department of Justice (which has the power to block ownership transfers for "restraint of trade") and the CAB (which must approve changes of airline ownership). No action was taken. According to a senior CAB official, "There have been no antitrust cases in aviation thus far…the Department of Justice and CAB have responsibility but the policy is immature."[87] In contrast, Taiwan's MOTC and CAA doggedly and successfully pursued a policy of two competitive international carriers by awarding international air service rights and air cargo terminal usage in an even-handed fashion. In addition, an activist Fair Trade Commission served as a deterrent to anticompetitive practices by air cargo suppliers.[88] It is highly unlikely that Taiwanese institutions would have allowed a CAL takeover of EVA (or vice versa).

A final important contrast in institutional design was in the organizations responsible for air service agreements – the Civil Aviation Authority (CAA) in Taiwan and the Civil Aeronautics Board (CAB) in the Philippines – and their relations with domestic interests and civil society. The CAA, a branch of the Taiwan's Ministry of Transportation and Communications, was staffed with civil service professionals with aviation expertise and many years of experience. This engendered a long-term perspective and policy stability.[89] The Philippines' CAB was a semi-autonomous, five-member panel of presidential appointees with a six-year term that were intended to represent tourism, the private sector, and broader economic interests.[90] The Philippine president not only appointed the CAB, but also personally approved all ASAs before they become law in accordance with Executive Order 219. In Taiwan, ASA approval authority was delegated and the President was rarely involved.[91] The political nature of the CAB contributed to the policy zigzags over the study timeframe: from tepid liberalization, to all-out liberalization, to restriction and PAL protection.

The CAA and CAB also differed in their linkages with domestic interests and non-government organizations. In Taiwan, an intermediate institution representing all domestic air carriers, the TAA, was created to provide private sector input into ASAs. This limited the scope of airline lobbying activities and encouraged ASAs with an industry-centric rather than a firm-centric perspective. As noted earlier, this facilitated the development of two world-class cargo carriers even as UPS established a hub in Taipei. It is also interesting to note that most input to government decision makers came from domestic suppliers, rather the consumer groups, labor unions, industry associations, or advocacy groups. Overall, the "demand side" of the market was not as well organized politically as the "supply side."

The Philippines did not have a successful intermediary institution like the TAA. Individual carriers participated in ASA negotiations and used many channels to influence the CAB and even the President to advance their interests. These channels included direct bilateral lobbying of the President and CAB officials, public affairs campaigns to influence the public, and legal challenges – such as PAL's lawsuit against a CAB official supporting open skies with Singapore. It was a messy institutional design that led to messy results. The 1997 DOTC aviation master plan, prepared by an Australian consultancy, recommended implementing an intermediate institution similar to Taiwan's TAA to facilitate competition and reduce rent-seeking activity.[92] The same report recommended abolishing the CAB and allowing the DOTC to handle its activities. The recommendation was not adopted.

Another contrast between the two states is that civil society appeared to be better organized in representing demand formation in the Philippines. Indeed, the Philippines boasted the third largest NGO community in the developing world. Between 1986 and 1995, the number of registered NGOs grew by 160 percent to reach 70,200.[93] An NGO representing the interests of air transportation consumers (The Freedom to Fly Coalition) was created in reaction to the government's protection of Philippine Airlines in 1999. The organization had limited influence in the study period, but its influence steadily grew in 2000 and 2001 as it documented the cost of restrictive aviation policies (aided by a free press) on the national economy and Filipino consumers. While the activity of NGOs like The Freedom to Fly Coalition was impressive, their influence was constrained by the lack of well-defined channels of interaction with government officials.[94]

Domestic Interests

The role of domestic interests in Taiwan and the Philippines shared some similarities. In both countries, air carriers were the most active domestic interests and had significant influence on air service agreements. At the same time, "flag" carriers PAL and CAL lost market share and influence. New entrants (EVA and PEAC) stimulated demand for new international air routes and highlighted the need to differentiate air cargo services as distinct from passenger services. While air carriers were active in ASA development, they did not exert significant influence in other policy matters, such as FDI, customs, market entry by the large TNCs (i.e., FedEx and UPS), and infrastructure. Other interests with a stake in policy outcomes -- freight forwarders, customs brokers, and air cargo customers -- had minimal influence in policy outcomes in both countries. Non governmental organizations and advocacy groups representing the "demand side" of the market, while more numerous and better developed in the Philippines than in Taiwan, also did not exert much influence on policy outcomes in the period of study.[95]

Despite these similarities, there was a crucial difference in the influence of domestic interests: in the Philippines, a single *individual*, Lucio Tan, was able to sway many aspects of air cargo commercial policy in the late 1990s. With the Constitution mandating a minimum of 60% of equity holding in public utilities to be held by Filipinos, domestic investment capital was a scarce commodity. Thus the country's rich individuals had considerable bargaining power. Mr. Tan's wealth and a strong personal relationship with President Estrada were a potent combination. His influence touched both trade policy (restriction of ASAs) and industry policy (takeover of PEAC, PAL protection). He also appeared to develop influence over the Civil Aeronautics Board, the government organization responsible for negotiating ASAs, by early 2000.[96] Lucio Tan's influence as a wealthy, well-connected individual in a rentier society effectively pushed PAL's concerns – which had lost credibility throughout the decade -- to the top of the air transportation policy agenda. Weak Philippine institutions fomented this influence – an issue described later in this section.

Ideas

Ideas and ideology played very different roles in the policy outcomes of Taiwan and the Philippines. In Taiwan, liberal economic beliefs held by key decision-makers appeared to contribute to many air cargo policy reforms. APROC was an initiative spawned from economic analysis, with a clear understanding of how air cargo micro-economic policy affected that broader macro-economy. The impact on particular domestic interests was subordinated to national economic goals. One would be hard-pressed to find a more comprehensive blueprint for the air cargo sector from any other country during the study timeframe. This drove crucial reforms in FDI, customs practices, and competition policy with minimal input from domestic interests. The proliferation of what John Williamson (1994) has called *technopols* (i.e., technocrats that become high level political appointees) in key government positions contributed to the influence of ideas in Taiwan.[97]

The Philippines, in contrast, lacked a consistent ideas-based framework in the post-Marcos decade of the 1990s. The three presidential administrations had very different visions of the national economic interest, and often the views of the executive branch of government conflicted with the legislative branch. Where commercial policy decisions required approval of the executive and the legislature (such as infrastructure), the result was often stalemate.

However, where the executive branch controlled the policy outcomes, ideology could sometimes play a critical role. President Ramos' focus on *democratization, devolution, deregulation*, and *privatization* was the closest to an articulated policy framework and was the basis of Executive Order 219, an emphasis on special economic zones, and ASA liberalization. The national economic interest was more important than the existence of PAL; thus international air cargo rights were liberalized despite PAL's opposition to six of the ASAs completed under Ramos. Of the three Philippine presidents, President Ramos recognized the potential of exploiting the Philippines' location advantage for air cargo service and took an active involvement in air cargo policy creation. His initial policy directives to the CAB did not differ appreciably from the goals of Taiwan's APROC project. He had a vision of turning the Philippines into an air cargo hub and played and participated in the recruitment of FedEx to the Philippines. He pursued these objectives, however, in a very different institutional structure than Taiwan.

The Estrada Administration, in contrast, did not emphasize economic analysis in creating air cargo commercial policy. Interviews with senior CAB officials indicated that they did not have a full appreciation of the impact of air cargo service on trade or the dependence of the burgeoning electronic sector on air cargo service. The focus was mostly on PAL and its linkage with passenger travel and tourism.[98] Air cargo was clearly a second priority to passenger services.

As a fledgling democracy in the aftermath of martial law, the Philippines faced a structural roadblock to significant economic reforms: its political parties did not clearly articulate macro or micro economic philosophies. Elections were often based more on personality and parochial interests than substantial policy ideas. Richard Gordon, former

SBMA director, summed up the issue when he stated, "Our problem in the Philippines… is that we don't elect people based on ideas."[99] Lacking ideological contracts with the voters to guide and constrain policy decisions, Philippine politicians often defaulted to the demands of well-connected interests.

The Role Of Circumstances

Political and economic circumstances appeared to reinforce the impetus for air cargo policy reform to a greater degree in Taiwan than the Philippines. Simply stated, Taiwan's survival as an independent political entity was at stake in the 1990s, and this was not the case in the Philippines. Policies that reinforced Taiwan's relationship with the U.S. and its interdependence with the global community took on an urgency far in excess of the prevailing crises in the Philippines. Indeed, it can be argued that the APROC initiative was motivated as much by international politics as by the desire for macroeconomic reform. Similarly, an "open skies" air service agreement with the United States and significant FDI by UPS and FedEx served to expand ties with Taiwan's most important political and military ally. In contrast, crises in the Philippines (e.g., secessionist movement in Mindanao and the shutdown of PAL) were mostly domestic in nature and appeared to have less relative influence on air cargo reform.

With the domestic level of analysis complete, the focus of this research now turns to the role of international factors on policy outcomes. Chapter Five will focus on the impact of transnational interests – including TNCs and industry associations -- on air cargo commercial policy outcomes.

NOTES

[1] This definition is adapted from North (1990) and Kuo (1995). Kuo's study of Taiwan and The Philippines found that domestic institutions were decisive in policy outcomes in the electronics and garments industries. Other studies concluding that domestic institutions play an important role in sectoral policy outcomes include Thatcher (2000) and Milner (1997).
[2] Keohane and Milner (1996), p. 4.
[3] Milner (1997), p. 235.
[4] *Ibid.*, pp. 168 – 178. Milner argues that American and British air carriers were very influential on government bargaining positions.
[5] *Ibid.*, p. 60.
[6] Haas (1990), p. 55; Haas (1992), p. 3.
[7] Examples include Poland (1990), Mexico and Korea (1987), and South Korea (1979). Williamson, John and Haggard, Stephen, "The Political Conditions for Economic Reform, pp. 562-565 in Williamson (1994). Other studies that analyze the role of crises on policy reform include Bates & Krueger (1993) and Henderson (1998).
[8] Abueva, Jose et al (1998), pp. 93 – 97. Up to 20% of members of the House of Representatives may come from registered national, regional, and sectoral parties or organizations.
[9] *Ibid.*, p. 78.
[10] *Ibid.*, p. 89.
[11] Lakas-NUCK-UMDP, for example, defined itself as a party adhering to the economic policies of President Ramos. President Estrada's LAMMP party supported policies to aid the poor.
[12] The exception was establishing air service rights with another state for the first time, where the Department of Foreign Affairs (with CAB involvement) led negotiations. Most ASA negotiations were updates to existing agreements where the CAB took the lead.
[13] *Travel News Asia*, 22 September 1997. (http://www.web3.asia.1.com.sg/timesnet/data/tna) Accessed November 2000.
[14] NEDA developed a Medium Term Plan, generally six years in length that made recommendations regarding aviation infrastructure.
[15] *Travel News Asia*, 6 September 2000. Congressman Joseph "Ace" Durano of Cebu introduced House Bill 7681 to open air traffic rights to foreign competitors. (http://www.web3.asia.1.com.sg/timesnet/data/tna) Accessed November 2000.
[16] Interviews.
[17] Interviews. The second ASA is known as "BIMP-EAGA" For more about Ramos' involvement in BIMP-EAGA, see Almonte, Jose and Timberman, David, (1998), The Philippines: New Directions in Domestic Policy and Foreign Relations, New York: Asia Society and Singapore: Institute of Southeast Asia Studies.
[18] Interviews. An intermediary government-business organization known as the Civil Aviation Consultative Council was created in the late 1990s by the Ramos Administration to broaden participation in policy decisions but there is no evidence that it played a tangible role in policy outcomes, including ASAs.
[19] Interviews. In the 18 February 2000 issue of *Asiaweek*, President Estrada acknowledged that customs was one of the most corrupt government institutions in the Philippines.
[20] Interviews.
[21] SEZ incentives included tax breaks; duty free importation of capital equipment and raw materials; exemption from pre-shipment inspection; 5% tax on gross income in lieu of national and local taxes
[22] Interviews.
[23] Interviews. The SBMA wanted to bypass the CAB and lead ASA negotiations with the U.S., but this approach was rejected on the grounds that ASAs were done on a national (not regional) basis.
[24] Interviews. Fedex interviewees agree with Mr. Gordon's point of view. Throughout the negotiations, DOTC Secretary Garcia pushed for FedEx to locate to Cebu (his home province) in lieu of Subic. He did not prevail.
[25] *Cargo News Asia*, 26 January 2000.
[26] "Shifting Hubs," *Air Cargo World*, March 2000.
[27] Dejillas (1996), p. 155.
[28] Interview. Air France was also a protagonist.
[29] Interview.
[30] Interview. The lawsuit was still pending in 2000. The Singapore agreement was also scuttled by a diplomatic row involving the execution of a Philippine domestic servant.

[31] Interview.
[32] Interview. ASAs were focussed on passenger travel, which allowed PAL to carry cargo in the belly of the aircraft, but did not authorize rights all-cargo aircraft – the type utilized by PEAC.
[33] Interview.
[34] Interview. A supplemental payment was required for customs services outside normal business hours.
[35] Interview. Mr. Tan was the leader behind a domestic consortium (Filchart) that acquired the government's 80% equity stake.
[36] Interviews. Mr. Tan also bought a 70% stake in domestic carrier Air Philippines in 1999. Despite a provision in the Article 12, Section 19 of the Philippine Constitution that prohibits "combinations in restraint of trade or unfair competition," there was virtually no precedent for antitrust action in the Philippines.
[37] *Asiaweek*, 5 July 1996.
[38] *The Economist*, 5 February 2000
[39] Interviews. In congressional testimony, CAB member Franklin Ebdalin indicated that the need to protect Mr. Tan's investment in PAL was a key factor motivating ASA restrictions.
[40] *South China Morning Post*, 16 February 2000; *The Economist*, 5 February 2000
[41] Interview.
[42] By April 2000, the Freedom To Fly Coalition helped to bring about a review of the air policy by the Secretary of Trade and Industry, Manuel Roxas II. More information on this organization can be found at www.freedomtofly.org.
[43] Hernandez, C.G. (1991) *"Political Developments in the Philippines,"* In Robinson (1991).
[44] Crisostomo, Isabelo T. (1997), p. 121.
[45] Interviews.
[46] Interviews.
[47] Interview.
[48] Interviews.
[49] Texts of speeches by Ramos and Garcia are included in Philippine Aviation Convention Committee (1994).
[50] Executive Order 219, Republic of the Philippines, 1995.
[51] Speech by President Fidel Ramos (Sixth Asialink Lecture), Melbourne. 21 August 1995. (http://www.asialink.unimelb.edu.au/public/ramos/html). Accessed May 2000.
[52] Interview.
[53] Chikiamco, Calixto V. (1992), p. 77.
[54] *Asiaweek*, 18 February 2000
[55] *Ibid.*
[56] Cathay Pacific offered to invest between 2 and 3 billion pesos (approximately $50 – 75 million) out of 6 billion total equity on the condition that it assumed full management control of PAL; the offer was rejected. China Airlines was also interested in an equity stake in PAL. In the end, PAL decided to move forward without a strategic partner. For a discussion of Cathay Pacific's bid, see *The Air Bulletin*, November 11, 1998. (http://www.airconnex.com/bulletin/back/3-11-11.html)
[57] Interview.
[58] Interview.
[59] McBeath, p. 84.
[60] Government Information Office, *The Republic of China Yearbook 1997*, (Taipei: 1997), p. 76.

[61] The Fair Trade Commission (FTC) was established on January 27, 1992 under the Cabinet. The FTC is the central competent authority in charge of competition policy and Fair Trade Law in Taiwan. It is charged with drafting fair trade policy, laws, and regulations, and investigating and handling various acts impeding competition, such as monopolies, mergers, concerted actions, and other restraints on competition or unfair competitive practices by enterprises.

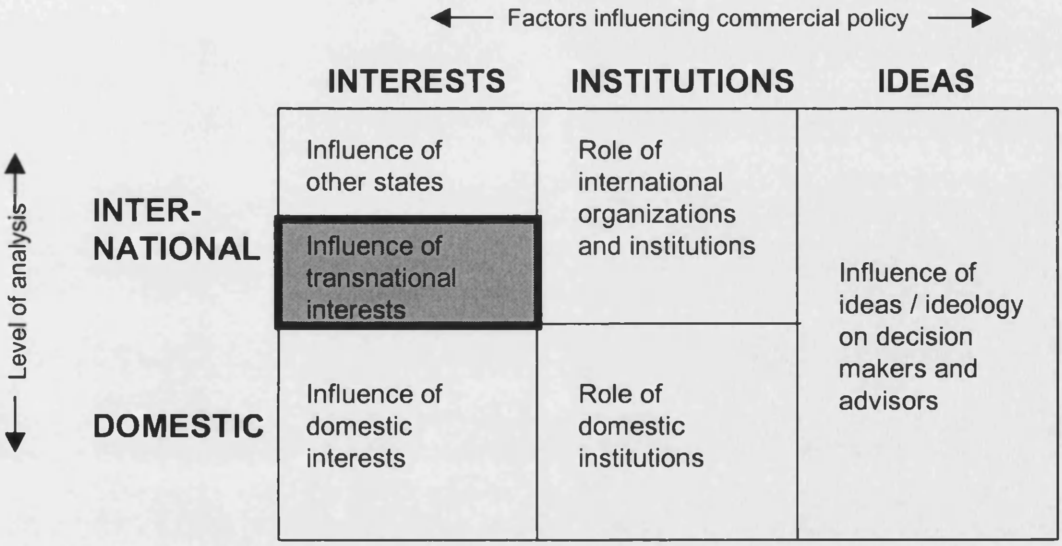
[62] McBeath, pp. 91-93.
[63] *Ibid.*, pp. 95 – 98. 114.
[64] *Ibid.*, pp. 105 – 112.
[65] *Ibid.*, p. 91.
[66] Interviews
[67] CAL and EVA have equal access to the U.S. market and boast reasonably equal air service rights to Asia and Europe.

[68] Interviews.
[69] Council for Economic Planning and Development (1998), pp. 4-5.
[70] Interviews
[71] Interview.
[72] Interview.
[73] Interviews.
[74] Interviews.
[75] China Airlines 1998 Annual Report
[76] "EVA's Profits," *Air Cargo World*, March 2000
[77] Interview.
[78] Interviews.
[79] Council for Economic Planning and Development (1998), pp. 4-5.
[80] Interviews.
[81] Council for Economic Planning and Development, Executive Yuan-Republic of China (1995*), The Plan for Developing Taiwan as an Asia-Pacific Regional Operations Center*, Taipei: CEPD, pp 19-20.
[82] Interview.
[83] Interviews. One interviewee stated that the CEPD has over 600 economists.
[84] Interviews.
[85] Habito, Cielito F., *"Social and Economic Development Planning*", pp 45 – 57, in Abueva et al (1998).
[86] Trinidad-Lichauco, Josefina, *"Transportation and Communications,"* pp. 512,513 & 523, in Abueva et al (1998). The DOTC also relied on an Australian Consulting firm to write its five year master plan.
[87] Interview.
[88] Although the Fair Trade Commission did not take any cargo specific actions, it did take action against alleged anticompetitive behavior by passenger airlines. In February 2000, it fined domestic carriers Far Eastern Air Transport and TransAsia Airways for "agreeing to engage in concerted acts of unconditionally endorsing and transferring ticket vouchers." In April 2000, it challenged a joint promotional venture among domestic airlines planned by the Taipei Air Transport Association.
[89] Interview.
[90] The CAB was composed of the DOTC Secretary, the Assistant Secretary of the Air Transportation Office branch of the DOTC (responsible for safety regulation); the Secretary of Tourism; and two private sector representatives. President Estrada appointed Mr. Franklin Ebdalin, Assistant Secretary of Foreign Affairs, as one of his two private sector representatives.
[91] Interviews.
[92] Amdidji Group Ltd (1997), p. II-8.
[93] Clarke (1998), pp. xxv – xxvi, 93. The NGO number includes people's organizations.
[94] The Philippine Constitution recognizes the importance of interest groups and allocates a portion of legislative seats for them, but participation in government structures is not well defined. See Dejillas (1996), pp 148-155.
[95] Interviews. The Philippines' Freedom to Fly Coalition, formed in late 1999, appeared to be gain influence after the study period in 2000 and 2001
[96] *The Philippine Daily Inquirer*, 31 May 1999.
[97] Williamson defined *technopols* as technocrats that have recently become political appointees at higher levels. See Williamson (1994), p. 12.
[98] Interviews. Domestic interests also argued that the CAB did not understand the negative impact on the tourism industry of a restrictive ASA policy.
[99] Interview.

Chapter VI: The Influence Of Transnational Interests On Air Cargo Commercial Policy

Moving from the domestic to the international level of analysis, the focus now shifts to transnational, or non-state interests. The key interests assessed are transnational corporations (TNCs) and industry associations. Prior to beginning the assessment, a brief review of the role of transnational actors in public policy formulation is in order.

Figure 6.1: Empirical Focus Of Chapter Six



Transnational Interests And The International Level Of Analysis

Thomas Risse-Kappen (1995) defines transnational relations as regular interactions across national boundaries when at least one actor is a non-state agent or does not operate on behalf of a national government or intergovernmental organization.[1] While most IR and IPE theoretical perspectives acknowledge the existence of transnational relations in the international system, there is considerable disagreement as to the impact of these actors on public policy. At one extreme are the dependency theorists and Marxists such as Andre Gunder Frank (1966), that view transnational actors – and TNCs in particular – as very influential actors in the international political economy, particularly in developing economies.[2] TNCs are generally exploitative, in their view. Susan Strange and John Stopford (1991) have also argued that TNCs are important actors in the international system, but they view TNCs in a more favorable light than dependency theorists. They posited that states must now bargain with TNCs as well as other states in their quest to create more wealth within their territory; they referred to this as "triangular diplomacy."[3] At one extreme are neorealists such as Kenneth Waltz who play down the role of TNCs. They view states as the dominant actors in the anarchic international system but they acknowledge the constraints, in some cases, imposed by more global economic activity and TNCs in policy outcomes. TNCs are clearly secondary actors in their view. While there is debate regarding the influence of transnational actors at the macro-level, there are also several hypotheses concerning why TNCs have more influence in some states than others. One argument posits that access to decision makers for transnational actors is more difficult in states with strong, well-insulated domestic institutions than those with relatively weaker institutions.[4] Another approach examines the relative bargaining power of states and transnational actors. Krasner (1995), for example, argues that transnational actors have less bargaining power in instances where they require territorial access in a state.[5] This argument is relevant to the air cargo industry, as TNCs are highly dependent on territorial access to develop a global network and expand revenue.

As foreign entities, the resources and communication channels available to transnational interests can differ considerably with those of domestic interests as described in Chapter Four. Transnational interests, for example, usually cannot mobilize votes and are normally prohibited from making direct political contributions. Despite these limitations, Katzenstein and Tsujinaka (1995) have outlined alternatives available to transnational actors for influencing policy outcomes. They can: 1) focus on the executive branch or national bureaucracy, 2) activate political actors in their home countries, 3) build alliances with interest groups in the host country, and 4) bypass the political process and create favorable public opinion.[6]

This brief theoretical overview on transnational interests lays the groundwork for the subsequent analysis. The key questions addressed by Chapter Six include:

- To what extent did transnational interests, including air cargo TNCs and industry associations, influence air cargo policy outcomes in the Philippines and Taiwan? What types of commercial policy did they influence the most?
- How did transnational actors attempt to influence policy outcomes? What resources and influence channels did they utilize?
- Did transnational actors utilize their home governments to influence policy outcomes? If so, which were most successful?
- To what extent was the influence of transnational actors attenuated by other variables, such as domestic institutions?

As with Chapter Five, The Philippines will be examined first, followed by Taiwan and a comparison of outcomes in both states.

THE PHILIPPINES

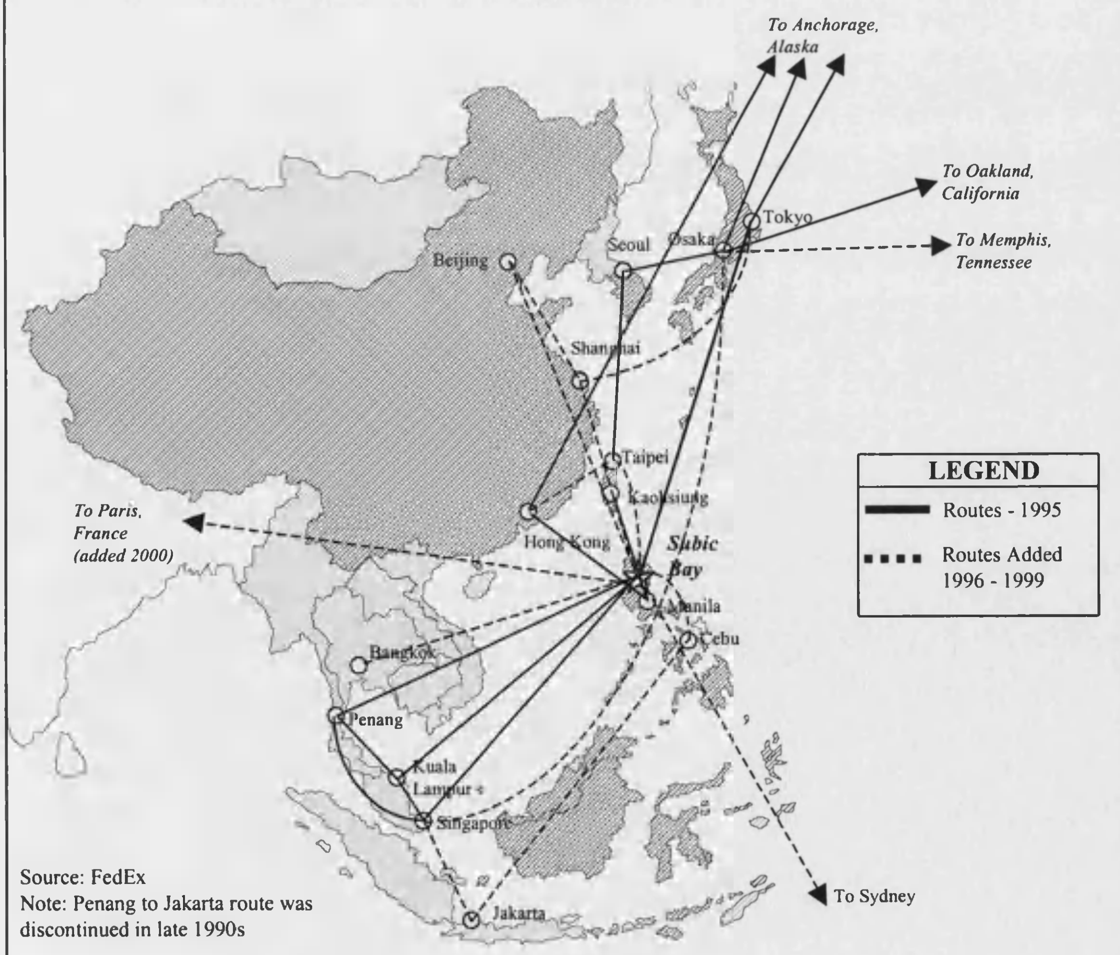
Air Cargo TNCs

Numerous transnational air cargo firms had a stake in Philippine commercial policy. Three major integrators (Fedex, DHL, and TNT) operated their Asian hub in the Philippines during the period of study and other air cargo operators counted on air service rights to this state as an important element of their network. Influence of air cargo integrators will be considered first, followed by other air cargo airlines.

Fedex

FedEx was a significant actor and the most influential air cargo TNC during the study period. As outlined in Chapter Two, developing a hub-and-spoke network in Asia Pacific was a key element of FedEx's strategy in the early 1990s. The selection of its primary Asian

Figure 6.2: FedEx East Asia Route Network

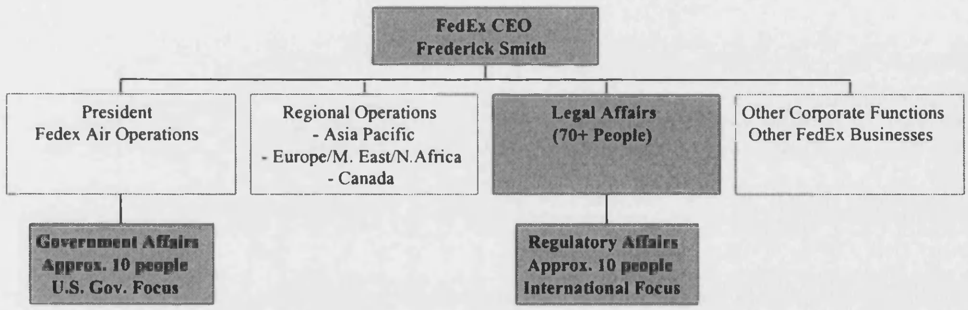


Source: FedEx
Note: Penang to Jakarta route was discontinued in late 1990s

hub hinged on four factors: 1) location, 2) autonomy, 3) twenty-four hour operations, and 4) liberal air cargo rights.[7] The ideal location would be a gateway for westbound flights from North America located in the center, and slightly to the east, of the Asian economic corridor stretching from Beijing, Seoul, and Tokyo in the north to Singapore and Jakarta in the south; clearly Luzon (Philippines), Taiwan and Southeast China all met this criterion. The distinction as a hub for westbound flights from FedEx's home territory (and largest cargo market) was important; if FedEx's primary focus had been Europe-Asia routes, then a gateway in Central Asia – perhaps in central China -- might have made more sense. Weather also played a role in the decision and the frequent cyclones passing through the Philippines were a downside to this location. The third selection factor – autonomy -- meant that FedEx would be the dominant tenant at the airport, would not be a second priority to passenger operations, and could run its own ground logistics operations. FedEx had a history of selecting hubs in secondary airports where it was the dominant operator, including Memphis (Tennessee), Oakland (California), Alliance Airport (Texas), and Stansted (London). FedEx's definition of 24-hour operations meant that it could operate aircraft at night and clear customs any time of the day. Airports with noise restrictions limiting nighttime operations or lacking 24-hour customs were not viewed favorably. Finally, air cargo "open skies" was a necessity. This went beyond simple 3rd and 4th freedom rights, as hub operations required transit of goods from one country through a hub to a third country. According to FedEx, "Fifth and sixth freedom rights were a huge deal -- we needed these to make the hub work."[8] Hubs also required the free exchange of cargo from one aircraft to another. In industry parlance, this was known as "change of gauge."

Against this set of needs, FedEx used considerable resources to influence commercial policy in the Philippines. One leverage point was FedEx's economic clout as the largest integrated air cargo TNC. FedEx spent considerable time educating senior government officials on the economic benefits of air cargo services, and pushed the case that a hub attracts high value-added companies. A second leverage point was the firm's government affairs and regulatory functions. In the late 1990s, approximately 100 people (figure 6.3) were dedicated to legal and regulatory functions, both international and domestic. At the

Figure 6.3: FedEx Legal and Regulatory Resources (1998)
(Most Significant Shaded)



Source: Interviews
Note: FedEx also had legal/ regulatory resources in regional operations

corporate level, FedEx maintained a legal function with more than 70 employees that included offices in Washington D.C., Brussels, Hong Kong, and Miami. The Hong Kong office focused on Asian issues. Reporting to the legal function was a regulatory affairs function that specialized in international regulatory issues such as air service agreements, postal legislation, and customs. In addition, FedEx's air operations boasted a government affairs function with about ten individuals, which monitored and lobbied U.S. government legislation. Government affairs interfaced primarily with the U.S. Congress.[9] Notably, the government affairs function also controlled FedEx's Political Action Committee, which contributed more than $1.4 million to political candidates in the 1999/2000 election cycle, making it the third largest *corporate* political action committee in the U.S., behind UPS and banking interest BankOne.[10] Overall, FedEx had very experienced and competent legal, regulatory, and government affairs personnel that focused on shaping commercial policy outcomes in the 200+ states where it operated. The size of this team exceeded 100 people in the late 1990s.[11]

While the organizational resources of FedEx were significant, it also leveraged a well-known Chief Executive Officer, Frederick Smith, who maintained relations with senior government officials throughout the world. Among Mr. Smith's acquaintances were the U.S. President Bill Clinton, Vice President Al Gore, and Secretary of Transportation Rodney Slater --relationships that he occasionally leveraged to communicate FedEx's requirements.[12] He also had an impressive roster of foreign contacts. The combination of FedEx's resources, experience, and its well-connected CEO were a formidable combination that often outpaced the efforts of FedEx's competitors. This led to a regulatory strategy that tended to emphasize bilateral rather than multilateral approaches for most of the decade. While some competitors (e.g., UPS) pushed for inclusion of air cargo using a Most Favored Nation approach in the General Agreement on Trade in Services (GATS) legal framework, FedEx preferred to retain bilateral rights as first established in the Chicago Convention. This is not surprising, as FedEx boasted the best portfolio of air service rights in the industry – particularly in Asia. FedEx, for example, was the only all cargo airline entitled to fly the burgeoning U.S. – China routes. The firm rightly believed that its regulatory prowess was a source of competitive advantage; bilateralism provided access to markets that were denied to its competitors. At the same time, FedEx pushed the U.S. government to separate air cargo rights from passenger rights in bilateral air service agreements.[13] In other words, FedEx was for cargo open skies, but wanted to maintain the current bilateral approach that emphasized state-to-state negotiations. An exception to this generalization was in customs reform, where FedEx embraced multilateral efforts to develop standards and procedures.

FedEx played a significant role in four commercial policy outcomes (Figure 3.6) in the Philippines over the study period: the 1995 U.S. air service agreement (ASA) that liberalized cargo and ground handling operations, the 1995 Subic Bay Express Customs Agreement, the decision to grant FedEx near-exclusive use of Subic Bay facilities, and a major upgrade of Subic Bay's airport and logistics facilities.

It is not coincidence that the Philippine government concluded an ASA with the U.S. in the same year that FedEx chose Subic Bay as its Asian hub; the two events were tightly linked. As discussed in Chapter Five, a key Fedex demand to the Subic Bay Metropolitan Authority (SBMA) for establishing its hub at Subic Bay was liberal air cargo provisions, including 5th and 6th freedom rights, cargo self handling, and provisions for allowing free transfer of cargo between different aircraft at the hub. The SBMA, wanting to close the deal, lobbied its Civil Aeronautics Board (CAB) and President Ramos while Fedex worked with the U.S. Departments of Transportation and State to revise the air cargo provisions of the U.S.-Philippine ASA. FedEx also directly lobbied senior government official in the Philippines. In the words of a senior Philippine CAB official, "FedEx wanted liberal intra-region transportation rights and got it." FedEx was not the only reason for the liberal ASA with the U.S. The ASA also recognized the significant Philippine economic and trade linkages with the U.S.[14] While broader considerations affected ASA negotiations, it is clear that FedEx -- along with the SBMA -- were the catalysts for action.[15]

The 1995 Subic Bay Express Customs Agreement was a second commercial policy influenced by FedEx. As a pioneer of integrated air express services, FedEx's knowledge of world-class customs practices was unrivaled. Governments rightly believed that they had much to learn from this TNC, as just-in-time production systems proliferated throughout the region. However, changing customs policies and procedures was often a difficult political endeavor. Tariffs derived from customs were not only a significant source of revenue – particularly for developing countries – but were also fraught with overlapping areas of responsibility between government ministries. FedEx's approach started at the highest levels of government, educating cabinet level officials about the impact of modern customs processes on national economic development. This approach was used very successfully in the Philippines, with FedEx obtaining the only standard 24-hour standard operations in the country. In addition, it was allowed to integrate many of its systems and processes into Subic Bay operations and to train customs officials on how to meet its requirements.[16] The results, as outlined in Chapter Four, were very positive.

The final two commercial policies where FedEx exerted influence were obtaining near-exclusive use of Subic Bay facilities, and persuading the SBMA to undertake a major infrastructure upgrade program. The specifics of the SBMA-FedEx bargaining concerning these policies were already discussed in Chapter Four and it is not clear which party had the upper hand. In many respects, it was a traditional bargain stuck between a government and a TNC to facilitate FDI. What is clear is that FedEx and SBMA needed each other and were able to create a world-class cargo facility without significant involvement of the national government – which was unable after years of trying to build a modest air cargo terminal in congested Manila.

One Philippine law that presented an obstacle to FedEx was the requirement for 100% domestic ownership of freight forwarders and customs brokers. It does not appear that FedEx lobbied to change this policy, as it would have required revision to the Philippine Constitution. In lieu of outright ownership, FedEx forged an alliance with Air Freight 2100, a local freight forwarder. FedEx aircraft served Subic Bay, Manila, and Cebu but let Air Freight 2100 service the rest of the Philippine market. Local freight forwarding capability, while important for serving the local market, was not critical for establishing an air cargo hub. It therefore was not one of FedEx's key requirements for selecting Subic Bay as its primary Asian hub in the mid-1990s.

While it is clear that FedEx bargained successfully in some instances on a *bilateral* basis, it also participated in international business organizations with a regional or global role, including the International Air Cargo Association, the International Express Carriers Convention, the American Chamber of Commerce, and the U.S.-ASEAN business council. FedEx also lobbied many intergovernmental organizations, including the World Customs Organization, the Asia Pacific Economic Cooperation (APEC), and the World Trade Organization. Finally, FedEx also worked with various agencies of the U.S. government to advance its interests.[17] The impact of these organizations on Philippine commercial policy decisions, and FedEx's role therein, will be examined later in this chapter and in Chapter Seven.

United Parcel Service

UPS was a relative latecomer to Asia. It began operation in Singapore in 1988 with 80 employees.[18] In contrast, DHL had been in the region for 20 years and FedEx had an extensive network as a result of its 1989 purchase of Flying Tigers. After slowly expanding its Asian business volume, UPS began a search in the mid-1990s for a primary hub in Asia. Manila was one of several candidates for the hub and was not selected. The reasons for this decision will be discussed later in this chapter. Subic Bay was also briefly considered. Prior to attracting FedEx to Subic Bay, SBMA Administrator Richard Gordon also approached UPS to make Subic Bay its Asian hub. UPS ruled out Subic Bay as a hub candidate for two reasons: 1) SBMA's runway was too short for Boeing 747 aircraft operated by UPS, and 2) concern about the SBMA's status as a local (rather than national) actor in the Philippines. According to a UPS executive, "Richard Gordon was great, but he was just the SBMA Administrator; he couldn't change the Philippine bureaucracy and culture."[19]

While UPS chose not to make the Philippines its Asian hub, it did take action to strengthen its presence in the Philippines. UPS formed a joint venture with Delgado Brothers (Delbros) worth about $200 million in November 1996; UPS assumed 60% ownership of the joint venture. At the time, Delbros was one of the Philippines' largest transportation companies and a UPS agent since 1988. At discussed in Chapter Four, this agreement was significant because it technically violated a law barring foreign ownership of freight forwarding agents and customs brokers. The Philippine government despite protests from domestic interests took no action to block this agreement. The UPS joint venture strategy in the Philippines was not unique; the firm also developed joint ventures with freight forwarders in Japan, New Zealand, Korea, and China in the late 1990s.[20] With the UPS-Delbros tie-up came a request for UPS to receive air service rights into Manila's Ninoy Aquino International Airport. In late 1996, UPS lobbied the Philippine Department of Trade and Communications for the rights, while the UPS Asia Pacific President, Charles Adams, wrote a letter to

President Ramos requesting authority to use NAIA.[21] UPS' efforts paid off when it eventually received six frequencies per week into Manila in an updated ASA with the U.S.

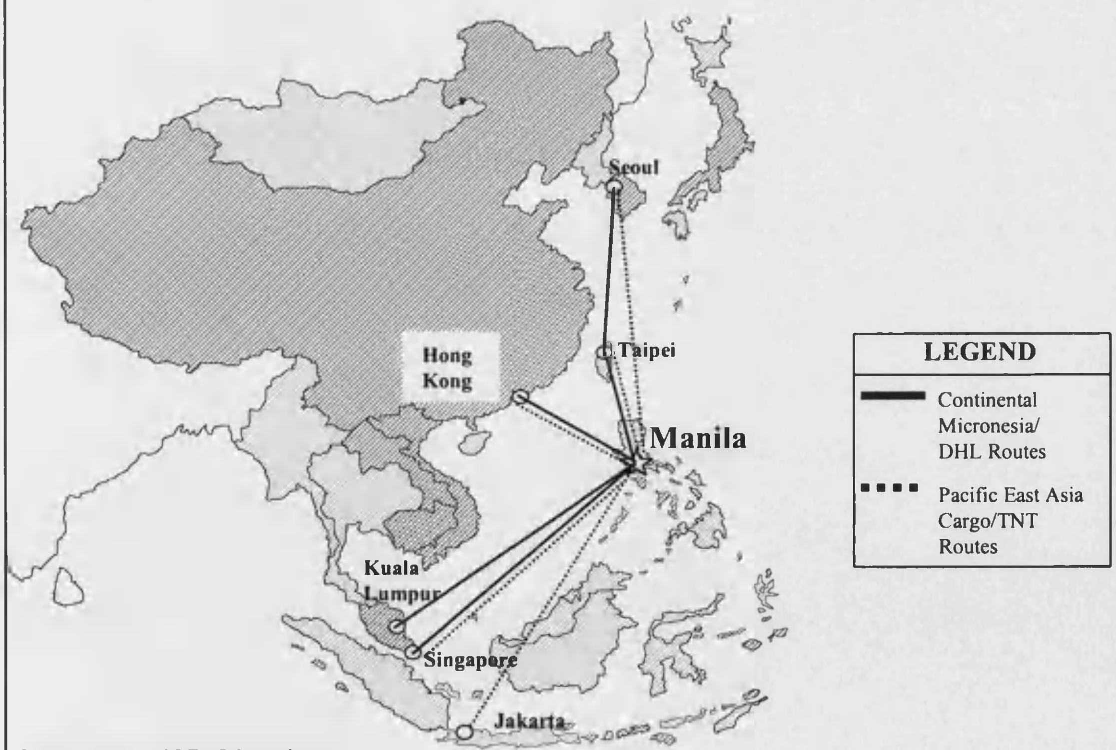
DHL

DHL began operations in the Philippines in 1971. Its focus was to develop an extensive ground delivery network, and by the late 1990s it had more than 100 facilities throughout the Philippines and the largest presence of any of the big four integrators.[22] DHL relied exclusively on leasing cargo space from other airlines until the mid-1990s, when it decided to establish its own air network in Asia. Preliminary discussions were held with Richard Gordon of the Subic Bay Metropolitan Authority and the Clark Special Economic Zone as a possible hub location. DHL eventually chose Manila reasoning that its central location and the relative inactivity at night during sorting operations could provide the needed flexibility to run a hub operation. DHL invested $3.5 million in state of the art sorting equipment and also developed 60,000 square feet of warehouse space. DHL called the Manila hub a focal point of enhanced intra-Asia services and expected the hub to "set new industry standards."[23]

DHL, along with UPS and FDX, worked with the Bureau of Customs to implement customs automation in the mid-1990s. It was also offered special customs support in Manila beyond the standard shifts from 8 a.m. to 6 p.m. if it paid overtime. Standard 24-hour customs operations, like FedEx received at Subic Bay, did not happen.[24]

With the location established, DHL faced another key obstacle to establishing air operations. As a Belgian firm, it lacked air service rights to other countries in the region. With no direct flights from Belgium to the Philippines, its bargaining leverage was limited in trying to negotiate air service rights to other countries. DHL approached the U.S. government to be named as one of three carriers in the liberal 1996 U.S. – Philippine air service agreement, arguing that ownership of an American subsidiary qualified DHL to be an American firm. The U.S. government turned down this request.[25] In early 1996, DHL decided to lease six dedicated 727 aircraft from Continental Micronesia, a subsidiary of U.S.-based Continental Airlines. This allowed DHL to develop a modest network of flights from the Manila hub to Singapore, Kuala Lumpur, Hong Kong, Taipei, and Seoul. There were many important destinations where DHL and Continental Micronesia lacked air service rights including Japan, China, and Thailand.[26]

Figure 6.4: DHL And TNT Dedicated Route Networks (1998)



Source: DHL and PEAC Interviews

Combined with inadequate air service rights and the lack of standard 24-hour customs, DHL was given notice that it would be moved from its cargo handling facility at Ninoy

Aquino Airport. These events, combined with the lure of the growing Chinese market (20% of its Asian business) and a new world-class airport in Hong Kong, influenced DHL's decision to move its hub to Hong Kong in late 1999 -- just four years after the Manila hub's much-promoted opening.[27] There may be one more factor that contributed to the move. According to a former CAB official, "The infrastructure excuse was a polite way of leaving...DHL was worried about the arbitrary nature of government actions and lost confidence – they saw what happened to TNT."[28] The reference to TNT was Lucio Tan's takeover of Pacific East Asia Cargo, TNT's partner in the Philippines.

It is clear from the events in the 1990s that despite having the largest (and longest) presence in the Philippines and Asia, DHL lacked clout when it came to influencing air cargo commercial policy. Faced with the development of Asian networks by FedEx and UPS, it was unable gain international air service rights when and where they were required and was forced to partner with Continental Micronesia and later Cathay Pacific. DHL was also not able to win standard 24-hour customs in Manila or prevent its relocation to much less desirable facilities at NAIA airport. Furthermore, there is little evidence that DHL was able to prompt the Belgian government or the European Chamber of Commerce to energetically promote its interests.[29] DHL's most notable success came from forming an interest group in 1997 with its three key competitors FedEx, DHL, and TNT. The group, known as the Chamber of Air Express Operators, had the objective of pursuing representing the needs of integrators – particularly for customs reforms – to the Philippine Government. This interest help to stimulate customs reform in the late 1990s focused on air express clearance.[30]

TNT

TNT, the final "big four" integrated air carrier, kept a low political profile as it encountered various setbacks in the Philippines. TNT entered the Philippines in 1982, relying on leased capacity from other air carriers for the air link of its integrated service. In 1994, TNT established its own air network with Manila as a hub by taking a 20% stake in Pacific East Asia Cargo (PEAC), a Philippine air cargo carrier. TNT did not have the option of operating its own aircraft in the mid-1990s; Australia lacked 5th freedom rights in its ASA with the Philippines. Using PEAC's air service rights and a modest fleet of three aircraft, TNT had direct flights to Singapore, Jakarta, Hong Kong, Taipei, and Seoul (Figure 6.4). This allowed TNT to offer end-of-day pickup for delivery within Asia the next morning; previously, TNT had to pick up packages mid-morning. As discussed in Chapter Three, TNT abandoned the venture after a takeover by Lucio Tan in the 1998/1999 timeframe. TNT, which became Dutch-owned in 1996, contested the legality of Tan's takeover in the courts, but apparently not through concerted political lobbying either directly or through its home government.[31] The firm closed its Manila air hub but maintained ground operations in Manila and Cebu. Air cargo space was once again leased from other carriers, including Cathay Pacific and Lufthansa. TNT's foray into providing its own air services failed.

TNT also faced impediments related to customs procedures. When it pulled out of the PEAC joint venture, it lost its own bonded warehouse at Ninoy Aquino International Airport with dedicated customs service. The Dutch TNC was forced to use NAIA's pooled customs services and queue with other carriers, which led to clearance times of 12 – 48 hours. According to a TNT executive, "the delays presented real problems for express shipments – we had to plead with them to clear shipments or a customer's production line would be shut down."[32] TNT was also affected by selective enforcement of a law barring foreign ownership of customs brokerages. TNT had traditionally employed its own customs broker, but after a dispute with the government in the late 1990s, the law was enforced and the firm was forced to contract with local brokers. This is the *same* law that the government chose not to enforce with the UPS/Delbros joint venture. TNT communicated its needs relative to customs procedures through the Chamber of Air Express Operators, the previously described interest group with UPS, DHL, and FedEx.[33]

Other Cargo Airlines and Freight Forwarders

Other cargo airlines had limited influence on commercial policy. The most vocal interest was Singapore Airlines, which was interested in hubs at the Clark SEZ and Cebu and lobbied for open skies throughout the region. Singapore Airlines was the chief protagonist, along with PEAC, for an air service agreement in 1994 that expanded air cargo capacity between the two countries.[34] However, a push by Singapore Airlines and the Singapore Government in 1997 for a open skies agreement with the Philippines fell on deaf ears given the perceived asymmetric benefits this would afford Singapore Airlines, particularly in passenger travel. Philippine Airlines, as discussed in Chapter Three, was also a vocal opponent of Singapore open skies and sued Philippine Civil Aeronautics Board member for supporting this agreement.[35] Singapore Airlines, the only airline from Singapore aside from its subsidiary (Silk Air), had a very active government affairs function. In 1997, it initiated negotiations that led to a much-heralded open skies agreement with the U.S. The agreement gave Singapore Airlines "beyond rights" from the U.S. to other countries.[36] The government affairs function also used speeches and newspaper editorials to push the benefits of liberal aviation rights directly to Philippine consumers.[37] Where it could not achieve air service liberalization, it was willing to consider alliances. In 1998, for example, it concluded a cargo alliance with Japan Airlines to serve the highly restricted Japanese market. Singapore Airlines also pushed for easing airline FDI restrictions. It expressed interest in purchasing an equity stake in Philippine Airlines in 1998 (during its financial crisis) and also in Thai Airways in 1999. At the close of the decade, it achieved a breakthrough in FDI restrictions – albeit not in the Philippines -- when it purchased 49% of Virgin Atlantic and 25% of Air New Zealand.[38]

CLA Air Transport was an air cargo joint venture between Japanese (40%) and Filipino (60%) investors. CLA, formed in 1997, targeted the Japan-Philippine air cargo market that was dominated by U.S. carriers.[39] President Ramos designated CLA as a Philippine flag carrier and it was awarded six flights per week into busy Narita airport in Tokyo under a temporary operating permit. The permit, however, was not renewed and the air service rights were awarded to Philippine Airlines in 1998 after President Estrada assumed power. CLA raised the issue with Japanese Prime Minister Obuchi, who met with President Estrada to press CLA's case in June 1999. President Estrada ordered his transportation secretary to meet with Mr. Lucio Tan (majority owner of PAL and PEAC) to resolve the issue. According to CLA, Mr. Tan's demands included a reduction in the number of weekly flights from six to one and a $15,000 payment for each flight.[40] Despite critical press coverage and a resolution adopted by the Philippine Senate directing an investigation of CLA's unfair treatment, the carrier was unable to gain a foothold in the Philippine air cargo market. Despite substantial Filipino equity and backing of the Japanese Prime Minister, CLA had met the same fate as PEAC as another failed air cargo joint venture.

United Airlines and Northwest Airlines were the two American air carriers with substantial Asian air rights and both operated flights to the Philippines. Their presence was a legacy of air service rights that they received, along with Flying Tiger, after World War Two. United Airlines, which had a cargo business unit, lobbied the Philippine government regarding inconsistent application of customs fees in the late 1990s.[41] The result was improved compliance with existing laws rather than a specific policy change. United Airlines also supported open skies and was an active participant in the APEC transportation subcommittee. Its focus, however, remained passenger issues and it did not affect policy outcomes cited in this research. The other major American carrier serving the Philippines, Northwest Airlines, focused most of its political energy on maintaining Japanese 5th freedom rights to allow it to continue to serve Manila and other Asian destinations from its Tokyo hub. Cargo accounted for about 10% of its revenue in the late 1990s. It is interesting to note that despite having a broad international network and 50 years of operating experience in Asia, Northwest dedicated approximately 10 personnel to political and regulatory affairs – a fraction of the 100+ personnel at FedEx.[42]

Freight forwarder TNCs, like non-integrated cargo airlines, did not have a significant impact on commercial policy decisions. The nature of their operations would indicate that customs policies, as well as FDI restrictions, might be on their government lobbying agenda. The Philippine freight forwarding market, however, was very fragmented. The top ten air cargo freight forwarders had in-country revenues in the $11 - $25 million range in 1999; the largest were Geologistics (U.S.), Nippon Express (Japan), and Yusen Air & Sea (Japan).[43] Overall, it was the large air cargo integrators that most influenced policy changes in the Philippines – not the highly fragmented freight forwarders.

Other Transnational Actors

Electronics/Manufacturing TNCs

Electronics and information technology TNCs, despite their growing dependence on global supply chains, had a minor influence on air cargo policy outcomes. Most lobbying was done though secondary channels such as Chambers of Commerce organizations. There were a few examples of firms that sought to influence air cargo policies. Advanced Micro Devices, a U.S. electronics TNC, left the Philippines for Malaysia in the early 1990s in part due to inadequate customs service. In roughly the same timeframe, U.S. disk drive manufacturer Seagate Technologies wanted time-definite delivery to Malaysia as part of its global supply chain and did lobby successfully – along with domestic carrier Pacific East Asia Cargo – for the adoption of 24-hour customs service in the early 1990s.[44]

The 1999 Philippine-Taiwan air row, which resulted in the cessation of direct flights between the two countries, had a significant impact on many electronics TNCs and ignited their interest in air cargo commercial policy. The notion of a "global supply chain" was very evident in the trading relationship between these two states in high technology goods. In some cases, Philippine microelectronics devices were exported to Taiwan for final assembly; in other cases the reverse was true. Intel, for example, incurred much higher shipping costs to ship microprocessors through Hong Kong to Taiwan. Intel, however, kept a low public profile through the incident and made its opinions known through diplomatic back channels.[45] The same cannot be said of Acer Computer, the Taiwanese TNC that had one of its largest computer manufacturing facilities at Subic Bay. Although Acer used FedEx (unaffected by the Taiwan-Philippine row) to deliver finished goods to North American and European markets, it depended on air cargo service from other carriers to deliver Taiwan-produced microelectronic sub-assemblies to the Subic facility. Cessation of direct flights from Taiwan resulted in delays of deliveries of three to five days, which cut Acer's production capacity from 100,000 to 50,000 laptops per month in early 2000.[46] Acer went public with its complaints and threatened to pull out of the Philippines if direct cargo and passenger flights were not reestablished. Acer's threats, along with diplomatic efforts by Taiwan's government, were not enough to cause a breakthrough in the standoff. Acer moved part of its production capacity – and more than 1000 jobs to China and Taiwan in late 2000.[47]

Other TNCs did not factor into commercial policy outcomes. Most chose to operate behind the scenes or through their respective chambers of commerce, despite the fact that many were large exporters that depended heavily on import and export service. Even aircraft manufacturers, which stood to benefit significantly from air travel liberalization, did not actively lobby on air cargo commercial policy matters. [48]

Industry Associations and Chambers of Commerce

There were a number of organizations that represented TNC interests in The Philippines, with a mixed record of success. One group, the Philippine Chamber of Express Operators, was formed in 1997 to represent the needs of DHL, UPS, FedEx, and TNT to the Philippine government. The group was formed at the suggestion of the Bureau of Customs to improve interface and coordination with the "big four" integrators, following a similar approach used in Hong Kong, Brussels, and other locations. The focus of this interest group was primarily customs procedures and ground transportation issues. The Bureau of Customs considered this group to be "powerful" and it did put implementation of World Customs Organization Express Guidelines on the Philippine agenda for customs reform. However, for reasons that will be discussed in Chapter Six, the WCO Express Guidelines were only partially implemented.[49]

Another visible group was the U.S.-ASEAN Business Council, a membership organization representing the interests of 147 U.S. companies. In 1999, James Kelly, the Chief Executive Officer of UPS, was named president of the organization. In this role, Kelly was a vocal advocate of liberal aviation rights, customs reform, and leveraging electronic commerce to increase trade. In the following year, the organization published a study that urged many of these reforms. UPS and FedEx were key instigators of the study, and felt that recommendations would be more credible coming from a broader business interest group than individual efforts. The study was one of the few documented attempts by TNCs to influence public opinion regarding air cargo policy in the Philippines and throughout the ASEAN region. A major press conference was held to review research findings and copies of the study were sent to academics, government officials, and members of the media. Study findings were also reviewed at an ASEAN transportation committee meeting.[50] Despite these efforts, The US-ASEAN Business Council study and subsequent efforts to promote its recommendations came at the end of the study period and did not play a role in policy outcomes in this research.

The Manila-based American Chamber of Commerce was another organization representing U.S. business interests, but did not play a significant role in commercial policy outcomes. The primary focus of its transportation committee was information sharing. The European Chamber of Commerce played the same role with similar results.[51] The cessation of flights to Taiwan in 1999 did spur these two organizations, along with the Chambers of Commerce from Korea, Canada, and Australia-New Zealand to issue a position paper to the

Civil Aeronautics Board in April 2000 to reinstate air service rights. The paper noted the damage to high technology electronics exporters, and argued, "In an industry that accounts for 50-60% of Philippine exports, the country can ill-afford to squeeze these companies so that they relocate elsewhere."[52]

Finally, international industry associations such as the International Air Cargo Association and the International Air Transport Association did not play a meaningful role in the study period. A regional industry association, the 19-member Association of Asia Pacific Airlines, announced that after nearly two decades of making Manila its regional headquarters, that it was moving to Kuala Lumpur in 2000. The move was viewed by many as a protest of Philippine Airline's influence over national policies.[53]

TAIWAN

Air Cargo TNCs

Fedex

Contrasting FedEx's successful campaign to influence policy in the Philippines was its unsuccessful campaign to change commercial policy in Taiwan as it considered making Taipei its Asian hub in the early 1990s. Taiwan was initially favored as the best location for the FedEx hub; Subic Bay and Hong Kong were the other two finalists. The focus of FedEx's discussions was related to the hub selection criteria outlined earlier in this chapter: location, autonomy, 24-hour customs operations, and liberal air cargo rights (figure 6.5). Autonomy meant that FedEx needed a large sorting facility and control over all aspects of cargo operations. At the time, Taipei's Chiang Kai Shek International Airport (CKS) lacked adequate facilities and did not allow cargo self-handling. The Ministry of Transportation and

Communications offered FedEx its own 4,000 square meter facility. FedEx wanted a much larger facility and refused the offer. There were other disappointments. FedEx was not granted cargo self-handling rights and the Taiwanese government was not willing to let FedEx carry freight shipments exceeding 70 kilograms. The international freight business was important to FedEx – much more than to UPS and DHL – which focused on light shipments. Freight was also the core business of domestic carriers China Airlines and EVA.[54]

Figure 6.5: FedEx Asian Hub Requirements

Criteria	Taipei, Taiwan	Subic Bay, Philippines	Hong Kong
Location	**Acceptable**	**Acceptable,** despite high incidence of cyclones	**Acceptable**
Autonomy	**Not acceptable;** government would not grant self-handling of cargo and would share airport with CAL and EVA.	**Acceptable;** FedEx was guaranteed dominant operator status by SBMA.	**Not acceptable;** would compete with Cathay Pacific as dominant carrier.
24-hour operations	**Not acceptable;** government would not grant 24 hour customs.	**Acceptable;** FedEx granted 24 hour operations and customs.	**Not acceptable;** in mid-1990s, Kai Tak airport had a curfew for night operations.
Liberal Air Cargo Rights	**Acceptable;** Taiwan indicated willingness to consider cargo open skies.	**Acceptable;** no destination, capacity, or cargo transfer restrictions; offered special provision for cargo self-handling.	**Not Acceptable;** U.S. ASA had prescribed limits on capacity, routes, and transfer of cargo between aircraft. Protection of domestic carrier was a factor.

source: interviews

In parallel with facilities negotiations, FedEx actively drove changes in customs procedures. FedEx forged a close relationship with the Council for Economic Planning and Development (CEPD) and the two organizations cooperated to apply significant pressure on the Bureau of Customs to overhaul its operations. While there was resistance from the Bureau of Customs, there was also the realization that FedEx could provide information about modern customs procedures that could not otherwise be obtained; Taiwan was barred from the World Customs Organization, a key source of customs benchmarking information.[55] While FedEx obtained significant cooperation from the Bureau of Customs and some reforms were implemented, it did not gain a concession for 24-hour customs. This outcome, combined with unsuccessful facilities negotiations, killed the deal with Taiwan. According to a FedEx spokesman, "The reality is that the authorities wanted us to pay concessions for provision of the contract [for the terminal]. We operate out of airports all over the world and we don't pay concessions at any of them. We have since struck a deal for a separate facility at CKS that does not include concessions." A UPS official, however, believed that FedEx's failure was tied to not agreeing to a 70-kilogram maximum package weight at CKS.[56]

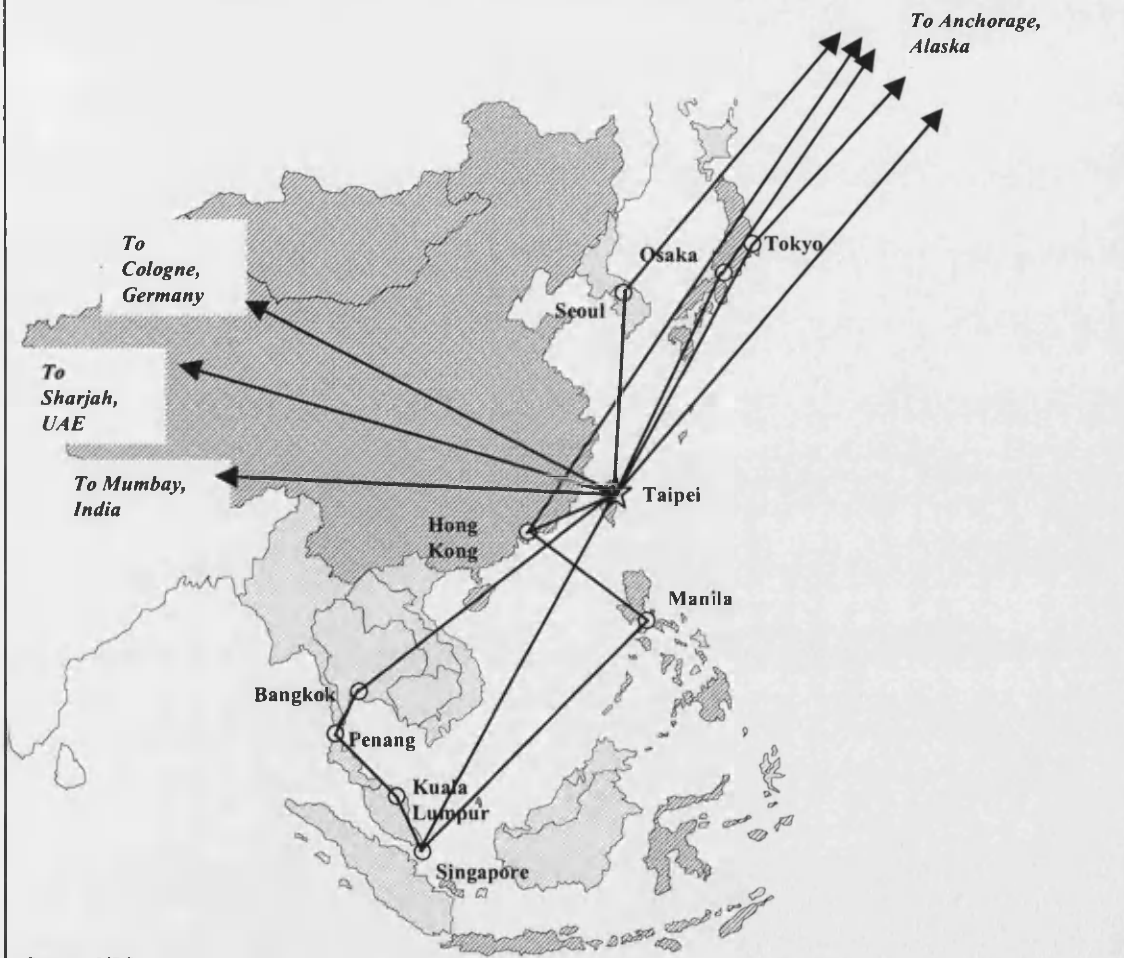
Perhaps the biggest obstacle to a Taipei hub was related to FedEx's aggressive negotiating style that alienated mid-level bureaucrats. According to a CEPD official involved in the negotiations, "FedEx miscalculated -- they applied lots of political pressure at higher levels of government but didn't pay attention to local concerns." Local concerns included a broad array of Taiwan's government institutions with a stake in negotiation outcomes. A senior official of the Civil Aviation Authority (CAA) was to the point: "FDX dealt only with the cabinet level, including the Premier and the President, but not the CAA...why are we here?" [57] Another factor that may have influenced the negative outcome was the composition of FedEx's negotiating team, which was primarily American. FedEx's attitude was summarized by its executive Vice President of Marketing in 1998: "We're the largest all-cargo carrier in the world, and as a result we've got a pretty good formula for attacking any market...whether it's China or Japan or Germany, it doesn't really make any difference." FedEx's approach was not successful when pitted against Taiwan's strong state institutions, setting the stage for UPS to step in and obtain a coveted air cargo hub in Asia.[58]

UPS

UPS began looking for an Asian hub in the early 1990s. Initial candidates included Honolulu, Guam, Taipei, Hong Kong, Macau, Manila, Kuala Lumpur, and Tokyo. The hub selection process involved three selection criteria, or screens. The first screen was economic development (i.e., the size of the local air cargo market) while the second screen was a central location with 24-hour customs operations. The first two screens eliminated Tokyo, Kuala Lumpur, Macau, Guam, and Honolulu; Hong Kong was also ruled out because Kai Tak airport lacked 24-hour customs operations.[59] Government policy was the third screen to evaluate the two finalists, Manila and Taipei. This included not only favorable air cargo commercial policies, but also decision-making transparency. According to a UPS executive, "In the early 1990s, Taiwan wasn't very transparent, but the Philippines was even worse; it's too bad that Singapore wasn't located farther to the North."[60] Beyond transparency, customs reform was the main issue considered by UPS. Here Taiwan was also perceived to have a slight advantage over Manila. After FedEx's negotiations with Taiwan broke down and Subic Bay was selected as its hub, UPS' negotiations moved into high gear. It used a much different negotiation style than FedEx. The UPS negotiating team also included local Asian executives, which adopted a more conciliatory approach to bargaining than FedEx's largely American team. UPS built relations both at high and middle levels of government and forged a broad set of relations that included the CEPD, the Ministry of Finance, the Civil Aviation Authority – an organization that FedEx had neglected in its negotiations. A Ministry of Finance official noted that UPS' key demand to come to Taiwan was 24-hour customs, and visited often to make its position known.[61] The CEPD, needing UPS to implement its Asia Pacific Regional Operations Center (APROC) initiative, leveraged its relationship with UPS to push through needed reforms against domestic interests opposed to reforms. The approach worked, and UPS was able to convince Taiwan to agree to the 1995 Express Customs Agreement (including 24-hour customs) and modify the existing U.S. air service agreement to include liberal provisions for air cargo service. It also provided the needed impetus for the APROC plan to upgrade and privatize CKS' air cargo terminals. In return, UPS conceded the right for cargo self-handling and agreed to a 70 kilogram cargo weight limit. By successfully adapting to Taiwan's culture and political structure, UPS was able to achieve in two or three months of negotiations what FedEx was not able to achieve in two or three years. The Taipei hub (figure 6.6) gave UPS an intra-Asia product comparable its competitors, and it allowed UPS to offer overnight service to the U.S. West Coast.[62]

UPS used more than bilateral negotiations to pursue its commercial policy agenda in Taiwan and the Asia-Pacific region -- it also lobbied its home government and numerous intergovernmental organizations and industry/trade associations. UPS had extensive political and regulatory resources at its disposal around the world, including a public affairs function with offices in Washington, D.C., Brussels, Singapore, Germany, and France. This was supplemented with numerous international lawyers and regulatory affairs specialists within regional operating units, including its 5,500 employee Asia-Pacific unit.[63] At home, UPS had high-level contacts throughout the U.S. government, about 300,000 employees spread over every congressional district, the support of organized labor, and a political action committee that dispersed more money than any other U.S. TNC in the late 1990s.[64] These resources helped to assure U.S. government support in negotiating on behalf of its interests, particularly when requiring air service rights. Two examples illustrate this point. After securing the Taipei hub, UPS lobbied the U.S. government to pressure Japan for additional "beyond rights" from Tokyo and Osaka to other points in Asia (including Taipei); Japan granted additional rights in 1996 and 1998. The 1996 agreement made UPS the first U.S. carrier to receive new "beyond rights" since the initial agreement was signed in 1952.[65] In the second

Figure 6.6: UPS East Asia Route Network (1999)



Source: UPS
Notes: UPS serves Sydney via direct Louisville (USA) flights
Direct Philippines -Taiwan flights were terminated in 1999

example, UPS beat rivals American Airlines and Delta Airlines in early 2000 to gain air service rights to the booming China market. The award came after a protracted and very public battle against two of the largest passenger carriers in the industry after a revision to the U.S.-China ASA allowed one new carrier to serve China with direct flights. UPS received the support of more than 340 members of Congress, over two-thirds of state governors, 80 mayors, and organized labor.[66] To some observers, the UPS victory symbolized the growing importance of the air cargo industry – traditionally new routes were awarded to passenger carriers. While these examples did not affect commercial policy in Taiwan, they did improve the feasibility of the Taipei hub's eventual success.

UPS also participated in a number of industry and trade associations, including the International Chamber of Commerce, the American Chamber of Commerce, and the International Express Carriers Convention (IECC). The IECC is a Brussels-based trade association set up by the "big four" integrators to provide customs policy input to the World Customs Organization. The IECC had observer status in WCO meetings, and cooperated closely with the WCO to establish standards for express shipments. Other intergovernmental organizations that UPS lobbied included APEC and the Organization of Economic Cooperation and Development (OECD).[67] UPS also tried to influence the World Trade Organization's agenda. In 1998, UPS Chairman and CEO James Kelly called on the World Trade Organization to include air cargo liberalization and customs reform to be included in the GATS intergovernmental negotiations.[68]

DHL

DHL had the largest presence of the "big four" integrators in the Taiwanese market, but was challenged in the late 1990s by American competitors UPS and FedEx. Beyond a single daily flight via partner Continental Micronesia to its Manila hub, it leased cargo space from more than 30 air carriers to serve an impressive roster of clients including Acer Computer and numerous financial institutions.[69] The Belgian TNC therefore did not focus on lobbying for air service rights like FedEx and UPS.

DHL's strength was a well-developed ground network. In 1999, it committed $30 million to expand the number of domestic service centers from 10 to 18 – all within 20 minutes from commercial and industrial clients.[70] Given this focus, it was very interested in obtaining its own airport sorting and logistics center with the announced expansion of air cargo facilities in Taipei in the late 1990s. DHL lobbied directly to the Taiwanese government with minimal success; it also approached the American Institute in Taiwan, the *de facto* American Embassy, to garner support for its position by contending that it was an American firm because it owned U.S.-based DHL Airways, a subsidiary. The request was rejected. Spurned by the Americans, DHL also did not garner significant support from the Belgian government or European Chamber of Commerce. According to a DHL official, "We asked repeatedly for space at Chiang Kai Shek International Airport (CKS), but they gave it to FedEx and UPS." One factor contributing to the decision was that DHL, lacking its own aircraft, was considered a freight forwarder rather than an integrated air cargo carrier.[71] Another factor was DHL's national origin. A Taiwan government official bluntly acknowledged, "DHL's service is as good as FedEx and UPS, but Belgium is less important and influential than the U.S."[72] Much like its experience in the Manila, DHL was forced to queue with other carriers to use a common customs clearance unit while FedEx and UPS enjoyed dedicated customs units and facilities. Its lack of dedicated aircraft operations and political clout contributed to a key commercial setback as two American TNCs encroached on its leadership position.

DHL was actively involved in shaping customs policies in Taiwan. DHL successfully lobbied, along with UPS, for a 1997 air cargo streamlining initiative. This included procedures that allow customs clearance before flight and eliminated tariffs on de-minimus shipments under 90 U.S. dollars.[73] Given DHL's focus on mostly smaller international express shipments, this reform was a major benefit to its Taiwan operations. DHL was a member of the previously discussed International Express Carriers Convention and also actively lobbied IGOs with a customs focus, including the WCO and APEC.[74]

TNT

TNT faced a very similar situation to DHL in Taiwan: a long history in the country, strength in ground operations, and lack of its own airlift capability. TNT relied completely on leased aircraft capacity from other countries. TNT differed in one important respect from DHL in Taiwan: it had about one-fifth of the turnover – approximately $20 million per year.[75] Overall, TNT had the lowest profile of the big four integrators in Taiwan. The Dutch TNC did not play a meaningful role in commercial policy decisions in Taiwan over the study period. Its lobbying efforts appeared to concentrate more on influencing intergovernmental organizations through trade associations like the International Express Carriers Convention than direct bilateral lobbying of national governments.

Other Air Cargo Airlines And Freight Forwarders

Overall, non-integrated air carriers were much less active in their policy interests with Taiwan. In part, this was due to the fact that cargo was less important to their overall business mix. It was also driven by the nature of the service they provided – the provision of non integrated air cargo service (and passenger service) generally required fewer policy reforms than integrated service.

Singapore Airlines was an active air cargo TNC in Taiwan, one of the most active of all non-integrated carriers. In 1995, it lobbied the Civil Aviation Authority to update the Singapore-Taiwan air service agreement to include unlimited 5th and 6th freedom rights for interchangeable passenger and cargo. The CAA was generally sympathetic to Singapore's request, but as discussed in Chapter Four, CAL and EVA were adamantly opposed to this policy and helped to drive a compromise limiting "beyond rights." The carrier also supported its home government's efforts to push an "open skies" agenda in APEC; this, however, did not affect Taiwan's air service agreements. Like its experience in the Philippines, Singapore Airlines was unsuccessful at obtaining equity in a domestic airline; its interest in purchasing a stake in China Airlines in the late 1990s was refused.[76]

United Airlines and Northwest were the largest non-integrated American carriers serving Taipei. United Airlines had a mini-hub in Taipei until 1996, and then cut back for business reasons. The carrier, which had a separate air cargo business unit, maintained access to liberal 5th freedom rights that went unused at the end of the study period. UAL was also an active member in the APEC transportation subcommittee.

There were a few other air carriers that were protagonists for ASA changes. Cargolux, a major European air freight carrier, lobbied the CAA successfully in 1997 to expand the Taiwan-Luxembourg cargo ASA which had reached its limits. Other air carriers that were protagonists for expanding air cargo capacity in the study period included Air France, Lufthansa, and Royal Brunei.[77]

The large Taiwanese air cargo market provided fertile business opportunities for freight forwarder TNCs. The three largest were Kuehne & Nagel (Switzerland), BAX Global (U.S.), and Panalpina (Switzerland), with in-country revenues of $88, $76, and $73 million, respectively.[78] While their local turnover was impressive (rivaling DHL), and they had significant business dealings with domestic air cargo carriers China Airlines and EVA Airways, they did not engage in active direct lobbying of Taiwanese government officials.[79]

However, it is interesting to note that Switzerland asked for (and received) concessions in FDI limitations on freight forwarders in its bilateral WTO accession negotiations with Taiwan. Keuhne & Nagel and Panalpina both have a strong interest in FDI liberalization and may have influenced their home government's position on this issue.

Other Transnational Actors

Chambers of Commerce

The American Chamber of Commerce (AmCham) is a foreign business interest that influenced customs reform in Taiwan. The Taipei branch of the AmCham boasted more than 1,000 members participating on various sector-focused committees; one of those committees focused on transportation issues. Each year, the Taipei branch of AmCham issued a white paper outlining desired public policy changes on behalf of its business interest membership. This document was widely circulated among senior government officials and arguably the most influential position paper on behalf of foreign business interests in Taiwan.[80] It was also used to guide AmCham's lobbying priorities.

The Chamber took full advantage of Taiwan's 1995 Asia Pacific Regional Operations Center initiative to lobby for customs reform. It interfaced regularly with senior government officials, including biannual review meetings with the Bureau of Customs. According to an AmCham official, "APROC gave us a stick...we told them that if you want to be a regional operations center, you must reform customs." AmCham also pushed for increasing allowable foreign ownership in freight forwarders to 50% and lobbied for lower landing fees at CKS.[81] For U.S. TNCs, the American Chamber of Commerce provided an alternative to direct government lobbying. It was not the only foreign business interest group, however, to take advantage of APROC. The European Chamber of Commerce established an "APROC clock" and periodically documented Taiwan's progress against published goals. The European Chamber also joined AmCham in lobbying for expanded ownership in freight forwarders, ground self-handling and lower CKS landing fees. Most of its focus, however, was on maritime transportation issues reflecting the interests of members such as Maersk.[82]

Electronics/Manufacturing TNCs And Non Governmental Organizations

It would be hard to overstate the importance of electronics TNCs to Taiwan's economy. The criticality of electronics exports has already been reviewed, and many of the exporters were foreign-owned TNCs. Despite their dependence on global supply chains and air cargo service, electronics TNC were not important players in driving policy changes. The preferred channels of interface were through the American or European Chambers of Commerce or through quiet, informal communication with government officials.

There is little evidence that transnational industry associations played a meaningful role in air cargo policy outcomes. Lacking United Nations membership, Taiwanese carriers were not part of the International Air Transport Association. Other industry associations, such as The International Air Cargo Association, also were not politically active in Taiwan.

COMPARISON OF THE PHILIPPINES AND TAIWAN

What have we learned from this chapter about the influence of transnational actors on air cargo policies in the Philippines and Taiwan? There were some important similarities between the two states. First, it is clear that among transnational air cargo business interests, integrators were the most influential actors in both countries. Integrators were key instigators for some important commercial policy changes, particularly for air service rights liberalization and customs reform. Liberal air service agreements in both countries were negotiated with significant influence from FedEx, UPS, and support of the U.S. government. These ASAs were the most liberal negotiated to date by either the Philippines or Taiwan. Integrators were also the chief non-domestic instigators for customs reforms. UPS, FedEx, and DHL clearly influenced customs reform in diplomatically isolated Taiwan, and FedEx obtained the only standard 24-hour customs in the Philippines. DHL also contributed to reform efforts in the Philippines. The argument here is that integrators acted as catalysts to implement customs reforms, many of which were also being pushed by international organizations like APEC and the World Customs Organization. As a Taiwan MOTC official commented, "Without FedEx and UPS coming to Taiwan, it might have taken Taiwan five to ten years longer to implement customs and ground handling reforms."[83] In contrast, other TNCs – including non-integrated cargo airlines, freight forwarders, and manufacturing TNCs – played a secondary or non-existent role in most air cargo policy reforms. A contributory factor to this phenomenon may have been related to the economic attributes of networks. FedEx and UPS based their competitiveness on a highly efficient Asian hub-and-spoke network, which, in turn, required a flexible and efficient hub airport. At stake were billions of dollars of potential revenue and hundreds of millions of dollars in FDI. For non-integrators, state regulatory barriers might affect competitiveness in a particular market, but not for the entire Asian region. The stakes were much smaller. Integrators, therefore, backed up their commitment to favorable commercial policies in hub countries with more intense lobbying efforts than other transnational business interests.

There were also similarities related to the influence channels utilized by integrators to influence commercial policy in both countries. Returning to the Katzenstein/Tsujinaka framework for TNC influence channels introduced at the beginning of the chapter, it is clear that FedEx and UPS utilized three of four available influence channels to affect policy outcomes in hub countries (Figure 6.7). Both actors utilized focused lobbying efforts on the executive branch and state bureaucracy. UPS was very adept at navigating and adapting to Taiwan's strong institutions and developed an alliance with the CEPD to achieve its aims. In the Philippines, FedEx garnered support from President Ramos for some of its key demands for locating at Subic Bay. Both TNCs also leveraged considerable political strength at home to garner U.S. government assistance with select policy objectives. While the specific actions of the U.S. government will be analyzed in the next chapter, FedEx and UPS were catalysts for U.S. government action to negotiate liberalized cargo provisions within air service agreements with both countries. The U.S. government also applied pressure, at the behest of these two carriers, to be awarded dedicated terminal space at Taipei's CKS airport. This type of support was important, as evidenced by DHL's inability to be awarded similar rights despite its strong Taiwan operation. Taiwanese government officials on the whole had a bias for U.S. firms; the economic and security ramifications of maintaining strong ties to the U.S. defined the policy development environment.[84] Both carriers also built alliances with interest groups in the Philippines and Taiwan. FedEx, in particular, leveraged the aspirations of the Subic Bay Metropolitan Authority and the residents of nearby Olongapo to create support within the Philippine political system. With the recent withdrawal of the U.S. Navy, there was considerable support to replace tens of thousands of lost jobs and avert economic disaster. UPS also reached out to local interests in Taiwan, but to a lesser extent than FedEx's approach in the Philippines.

It is interesting to note that both TNCs did not focus on bypassing the political process to create favorable public opinion. FedEx let Richard Gordon and SBMA take the lead for many of its objectives, as did UPS in Taiwan with the CEPD and its Asia Pacific Regional Operation Center initiative. Where there was an attempt to influence public opinion, it was done mostly through broader transnational interest groups, such as the U.S. -ASEAN Business Council or the American Chamber of Commerce.

Figure 6.7: FedEx and UPS Influence Channels In Hub Countries

Adapted from Katzenstein and Tsujinaka (1995)

Lobbying Approach	FedEx-Philippines	UPS-Taiwan
Focus on executive branch or state bureaucracy	**Significant** FedEx worked directly with highest levels of government (incl. President Ramos) to push open skies and 24 hour customs.	**Significant** UPS worked closely with the CEPD and the CAA to push policy agenda. Focus included cabinet officials as well as mid-level bureaucrats.
Activate political actors in their home countries	**Significant** FedEx utilized strong relationships At the highest levels of U.S. government to conclude liberal ASA with the Philippines.	**Significant** UPS benefited from high level U.S. relationships to conclude an ASA liberalizing air cargo services and gain access to its own air terminal at CKS. Also leverage AmCham.
Build alliance with interest groups in host country	**Moderate** FedEx aligned with Subic Bay Metropolitan Authority and interests in Olongapo City to achieve some of its objectives.	**Minimal** Most major policy initiatives did not include domestic alliances. UPS did join a China Airlines consoritum to take an equity stake in an air cargo terminal at CKS after establishing its Taipei hub
Bypass political process and create favorable public opinion	**Minimal.** Some activity through broader business interest groups (e.g. U.S. -ASEAN Business Council)	**Minimal.** The CEPD's APROC initiative negated the need for affecting public opinion. Some activity through broader business interest groups (e.g. AmCham's White Paper)

source: interviews

A third similarity between Taiwan and the Philippines is that transnational interests had the most impact on air cargo policies related to trade, particularly customs policies. There was less effort expended to change the other two categories – FDI and industry policy. FDI restrictions on ownership of air carriers were especially nettlesome; Singapore Airlines, for example, tried to purchase equity interests in the flag carriers in both countries but was rebuffed. Yet there were some FDI policy changes in both states for freight forwarding, ground handling, and terminal operations businesses. FedEx and UPS both bargained successfully to win important concessions for their hubs in Subic Bay and Taipei. UPS became the first foreign equity owner in Taiwan's air cargo infrastructure when it purchased a stake in the Taipei Air Cargo Terminal. Swiss freight forwarders also may have lobbied to include FDI liberalization in the Switzerland – Taiwan bilateral WTO accession negotiations, which increased allowable foreign ownership of freight forwarding and cargo terminal operators to 50%. Transnational interests did not appear to appreciably influence the major air cargo industry policy initiatives, including Executive Order 219 in the Philippines or the Asia Pacific Regional Operations Center initiative in Taiwan.

A fourth similarity was increasing government-TNC contact in the 1990s. TNCs included not only the integrated air cargo firms, but non-integrators as well. In total, they were protagonists in one-third to one-half of the nearly 50 air service agreements involving cargo completed in both countries.[85] In some cases, TNCs formed an alliance with domestic carriers to strengthen their case; in other cases they worked with their home government. They also lobbied the Taiwanese and Philippine governments directly to obtain necessary capacity. According to an official in Taiwan's Civil Aviation Authority, "In the last ten years, we're seeing more direct contact from air carriers. They're becoming more aggressive and political, which has opened up a two front battle for us – foreign governments and foreign carriers both pressure us."[86]

While there were some notable similarities in the influence of transnational actors on air cargo policy, there was an important difference driven by the nature of government institutions in both countries: the state was better insulated from transnational interests in Taiwan than in the Philippines.

In Taiwan, strong and coordinated government institutions—the same institutions that often held domestic interests like China Airlines and EVA Airways at arms-length – did the same for transnational actors for many policy outcomes. The CEPD and Ministry of Transport and Communications developed objectives under the APROC initiative that defined outcomes seen as desirable to the national interest. TNCs were vital tools in achieving these outcomes, but not at all costs. This is illustrated by FedEx's inability to achieve its negotiation objectives, including 24-hour customs, cargo self-handling, and no package weight limitations, when seeking to establish its hub in Taiwan. Despite the importance that the CEPD attached to the APROC plan and the centrality of attracting an air cargo integrator to the credibility of the initiative, Taiwan was willing to say "no" to this influential TNC. FedEx's aggressive negotiating style undoubtedly contributed to this decision, but it is clear that the government knew what it wanted and was not willing to be intimidated by a transnational actor into an undesirable decision. After rejecting FedEx, some negotiating leverage undoubtedly shifted to UPS, as it was the only other "big four" integrator with its own airlift capability. Taiwan made some concessions, such as 24-hour customs, that it did not make to FedEx. However, UPS took a political approach that respected the strength and cohesiveness of Taiwan's government organizations. The President of UPS Asia-Pacific, Charles Adams, summarized their approach, "We're a quiet company…sometimes we're the student, and sometimes we're the teacher."[87] Mr. Adams had strong Asian credentials; he spoke fluent Japanese and Korean, and was a member of the Singapore Economic Development Board -- the Board's first representative from the transportation and distribution industry in Singapore.[88]

In contrast, Philippine institutions were much less cohesive and lacked the resources of their Taiwanese counterparts; this meant that the state was not as well insulated from transnational influences. It also meant, paradoxically, that transnational interests were more at the mercy of domestic politics and powerful local interests, such as Philippine Airlines and Mr. Lucio Tan. Decision-making was neither transparent nor consistent. At one extreme, under President Ramos and the SBMA's Richard Gordon (1992 – 1998), TNCs were viewed as allies and had significant influence on commercial policies. At the other extreme, under President Estrada (1998 – 1999), TNCs saw their relative influence diminished. As a result, DHL and TNT moved their Asian hubs out of the Philippines, new transnational competitors were blocked from entering the market, and air service rights were terminated for Taiwanese carriers. President Estrada even fired SBMA Director Richard Gordon, a key proponent for greater TNC involvement in the Philippine economy. In retrospect, UPS' initial fears about the Philippine cultural and political environment were well founded.

One final point needs to be made regarding the influence of transnational actors. As the aviation industry has become more global, so too has the regulatory interest of TNCs. While in the 1970s and early 1980s, FedEx's primary public policy battles were to deregulate the U.S. cargo industry, its focus shifted to the global arena in the 1990s. Thus, government affairs functions that once focused primarily on domestic affairs were supplemented with international public and legal affairs resources aimed at a complex web of influence channels including foreign governments, intergovernmental organizations, industry associations, and supranational organizations (e.g., the European Commission). As a result, some TNCs developed more political clout, but were not omnipotent as evidenced by Taiwan's refusal to meet FedEx's demands and various setbacks for DHL, TNT, Singapore Airlines, and Japanese cargo carrier CLA.

With the analysis of transnational interests complete, the stage is now set for the final level-of-analysis: the role of other states and international institutions on air cargo commercial policy. This will be the focus of Chapter Seven.

NOTES

[1] Risse Kappen (1995), p.3.
[2] Frank (1966).
[3] Stopford and Strange (1991).
[4] Risse Kappen (1995), p. 7.
[5] Krasner, Stephen D., "Power politics, institutions, and transnational relations," in Risse-Kappen (1995), p 276.
[6] Katzenstein, Peter J. and Tsujinaka, Yutaka, "Bullying "buying," and "binding" :U.S. – Japanese transnational relations and domestic structures," in Risse Kappen (1995), p. 91.
[7] Interviews.
[8] Interviews.
[9] Interviews. Some regional operations personnel also had commercial policy involvement. This included FedEx's Asia-Pacific operations.
[10] Source: U.S. Federal Election Commission. (http://www.fec.gov/press/pacdisb1800.html). FedEx's ranking is measured by disbursements from January 1999 – June 2000. Overall, it ranked as the 37th largest political action committee behind industry associations, issue-oriented groups, and labor unions. Political action committees became a growing source of campaign funds in the 1990s for individual candidates and political parties in the U.S.
[11] Interviews. In 1998, FedEx split regulatory and government affairs into separate functions.
[12] Interviews. An example of Mr. Smith's relationship with President Clinton was a 1995 row over the U.S.-Japan air service agreement, which shut down FedEx flights from Japan to its new hub at Subic Bay. Mr. Smith outlined his needs with the President prior to a trip to Japan where Clinton argued for resumption of FedEx flights. FedEx's relationships were cultivated by the location of its headquarters and primary U.S. hub in Memphis, which straddled the border of Arkansas (where Clinton had been governor and Slater an Arkansas transportation official) and Tennessee (Gore's home state).
[13] *The Journal of Commerce*, October 19, 1999.
[14] Interviews.
[15] Interviews. FedEx was also a participant (as an observer) at the U.S. – Philippine ASA negotiations
[16] Interview. Other operators could get 24-hour customs in Manila if requested in advance; FedEx's 24-hour operation was standard. FedEx was also aided by Subic Bay's status as a freeport, which meant that customs was not involved in shipments not introduced to the Philippine economy.
[17] Interviews.
[18] *Cargo News Asia*, November 8, 1999
[19] Interview. Subic Bay's runway length was 2,744 m, compared to 3,800 at Hong Kong's Check Lap Kok.
[20] Interviews and UPS Press Release, April 29,1997. UPS also had a strategic agreement with Nippon Air Cargo in Japan. The Philippine joint venture was limited to packages less than 70 kilograms; local freight forwarders handled heavier packages.
[21] *Cargo News Asia*, 2 December 1996. The letter to president Ramos was forwarded through trade secretary Cesar Bautista.
[22] Interviews.
[23] DHL Press Release, March 6, 1996. See www.dh.com/info/news/html/pro60396.html
[24] Interviews. FedEx enjoyed standard 24-hour customs but also paid higher wages for evening shifts.
[25] Interviews.
[26] Interview.
[27] Interviews and *Air Cargo World*, March 2000
[28] Interview.
[29] Interviews.
[30] Interview.
[31] Interviews.
[32] Interview. Express customers included Philips N.V. and financial institutions.
[33] Interviews.
[34] Interview.
[35] Interviews.
[36] *Cargo News Asia*, February 24, 1997. Beyond rights generally means 5th freedoms are available.

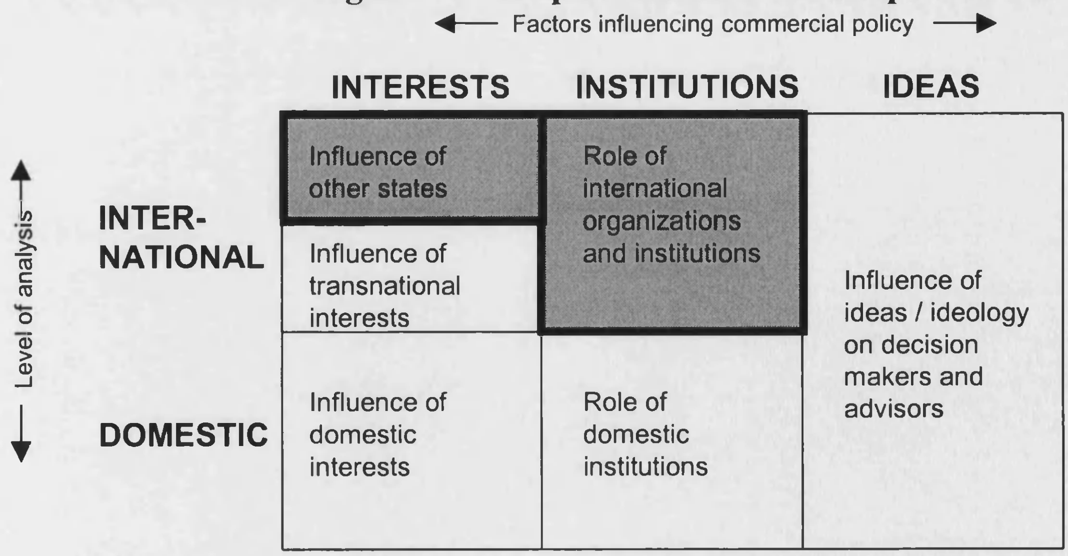
[37] An example is an editorial written by the Singapore Airlines Senior Vice President of Corporate Affairs in the September 15, 2000 issue of *The Manila Standard.*
[38] See *Cargo News Asia*, 26 April 1999 and *The Manila Standard*, 15 September 2000.
[39] *Flight International*, 1 January 1997.
[40] CLA Air Transport Statement (March 2000); interview.
[41] Interview.
[42] Interviews and company reports. Northwest's alliance with KLM Royal Dutch Airways instigated the 1992 open skies agreement between the U.S. and Netherlands.
[43] *Air Cargo News*, July 28, 2000. Geologistics had worldwide revenues of $1.5 billion in 1999.
[44] Interview.
[45] Interviews. One estimate is that shipping costs increased 9 million pesos (approximately $200,000) per month. The cost of additional inventory and work in process must also be factored in to determine the total cost. Intel met with Secretary Pardo of the Department of Trade and Industry to urge resumption of direct flights to Taiwan.
[46] *Business World*, 10 May 2000.
[47] *The Wall Street Journal*, 25 September 2000.
[48] One exception was a public statement by the president of Swedish Aircraft Manufacturer Saab in 1996 urging Asian governments to revamp their bilateral aviation agreements to lift route restrictions on aircraft under 60 seats. See http://web3asia1.com.sg/timesnet/indices/malays96.html.
[49] Meeting minutes, American Chamber of Commerce of the Philippines Transportation Committee, 9 October 1997; interviews.
[50] Interviews. Goyer, J. Envall, K., Tan, S.H. (2000) "Air Express Industry Plays Increasingly Important Role in ASEAN Economic Growth," Washington, D.C.: US-ASEAN Business Council. The report can be found at http://www.us-asean.org
[51] Interviews.
[52] Foreign Chambers of the Philippines, Position Paper to the Civil Aeronautics Board, April 2000; interviews.
[53] *Philippine Daily Inquirer*, 30 May 2000.
[54] Interviews. FedEx also involved the U.S. government in the air cargo terminal negotiations.
[55] Interviews.
[56] *Cargo News Asia*, June 9, 1997.
[57] Interviews.
[58] *The Wall Street Journal*, April 6, 1998.
[59] Interview. A new airport, Chek Lap Kok, was under construction and would offer 24-hour operation, but would not be available soon enough to meet UPS' needs.
[60] Interview.
[61] Interview.
[62] *Cargo News Asia*, June 9, 1997.
[63] Interviews. Within its Asia Pacific operating unit, for example, UPS utilized a Government Affairs and Customs Brokerage executive. The executive was a key participant in Taiwan's customs reforms.
[64] Source: U.S. Federal Election Commission. (http://www.fec.gov/press/pacdisb1800.html). UPS' ranking is measured by its $2.3 million in disbursements from January 1999 – June 2000. Overall, it ranked as the 14th largest U.S. political action committee.
[65] UPS Press Release, 30 January 1998
[66] UPS Press Release, 4 April 2000. UPS hired two former Department of Transportation officials to argue its case. The other three carriers with rights to China were Fedex, United Airlines, and Northwest Airlines.
[67] Interviews. Although UPS was not a member of the cited IGOs, it was an official observer or participant in ad hoc government-business committees. UPS also attended ASEAN Transportation Committee meetings and participated in the U.S.-ASEAN Business Council and Transatlantic Business Dialogue, although they were not focused on the Taiwanese market.
[68] Kelly, James P. "Global Trade in the New Millennium," speech to American Chamber of Commerce (Brussels), 19 May 1998. UPS, along with KLM cargo, also backed a bilateral air services approach between the U.S. and Europe in parallel with a multilateral WTO approach.
[69] Interviews. DHL had approximately $100m of business in Taiwan in the late 1990s.
[70] *China Post*, August 27, 1999.
[71] Interview. DHL Airways operated air express service in the domestic U.S. market.

[72] Interview.
[73] Interview.
[74] Interviews.
[75] Interview.
[76] Interviews. The Singaporean and U.S. governments did eventually conclude the world's first multilateral open skies agreement with fellow APEC members Brunei, Chile, and New Zealand.
[77] Interviews.
[78] *Air Cargo News*, July 28, 2000
[79] Interviews.
[80] Interviews. The European Chamber of Commerce was also active in Taiwan.
[81] Interviews.
[82] Interview. Only three European airlines (passenger focus) had direct air service to Taiwan. As of 1999, The European Chamber's APROC clock reached 29 minutes, indicating that only have of its desired outcomes had been achieved.
[83] Interviews.
[84] Interviews. Interviewees frequently mentioned the importance of U.S. military support versus a perceived Chinese threat.
[85] Interviews. In some cases, foreign carriers were more interested in obtaining passenger rights than cargo rights but bargained for both to increase their commercial flexibility.
[86] Interview.
[87] *The Wall Street Journal*, April 6, 1998.
[88] From UPS Web Site, see http://www.pressroom.ups.com/about/facts/view/0,1302,133,FF.html

Chapter VII: The Influence Of State-State Bargaining And International Organizations On Air Cargo Commercial Policy

The focus of this research now shifts to the remaining elements of the international level of analysis: the role state-state bargaining and the influence of international institutions on air cargo policy outcomes. The two will be analyzed in a single chapter to highlight the interplay between state-state relations – the bread and butter of traditional international relations theory – and the role of international organizations on commercial policy outcomes. In some cases, international institutions genuinely guide and constrain the policy options available to state decision-makers; in other cases, government officials use them as an alternative diplomatic channel to pursue state interests.

Figure 7.1: Empirical Focus Of Chapter Seven



State-State Bargaining, International Organizations, And Policy Outcomes

State-state bargaining is at the heart of realist tradition of international relations theory. The central tenets of realism have been covered in previous chapters, including the distribution of power as the explanatory variable in international relations and the emphasis on relative (rather than absolute) gains from bargaining outcomes. In the early 1980s, Oran Young (1980) and Stephen Krasner (1983) challenged the state dominated view of international relations by arguing that international regimes, or "sets of implicit or explicit principles, norms, rules, and decision-making procedures around which actors' expectations converge in a given area of international relations," could influence policy outcomes.[1]

This challenge spawned two opposing views to realism: institutionalism (rooted in regime theory), and modified structural realism.[2] Institutionalism views the gradual development of international institutions as guiding and constraining the decisions of policy makers. Participation in international organizations and regimes compels policy makers to interact repeatedly, which in turn leads to regularized patterns of behavior that develop a normative aura. The sense of "what is right" constrains policy decisions of states, regardless of the distribution of power. Moreover, once created, institutions may assume a life of their own – even if challenged by a great power.[3] Modified structural realism attempts to build a bridge between realism and institutionalism. Robert Keohane (1984), one of chief the proponents of this theoretical perspective, posits that states can continue to be utility-maximizing actors but can also choose to participate in an international institutions and regimes for this very reason—to maximize utility. He also argues that configurations of power can facilitate the creation of regimes. A hegemonic power, for example, has the ability to create and then impose stability on international regimes, such as America's role in creating the General Agreement and Tariffs and Trade and then compelling other states to adopt liberal trade policies as a price for access to the large U.S. market.[4] Like institutionalists, structural realists argue that once patterns of cooperation are established, they tend to persist because of the functions they perform and in turn come to influence state behavior.[5] At the same time, structural realists give greater credence to power and utility maximization in understanding the influence of international organizations and regimes in the international system.

While realists, structural realists, and institutionalists debated the sources of cooperation and conflict between states within in the international system, new challenges emerged in the late 1980s and 1990s that challenged the assumption of the state as the central actor, and the international system as the primary level of analysis. A number of scholars, including Robert Putnam (1988), Helen Milner (1997), and Andrew Moravcsik (1997), argued that the domestic level of analysis deserved as much emphasis as the international level; policy outcomes are therefore a synthesis of inputs from both.[6] Transnational interests, the focus of the previous chapter, also received greater attention – particularly the notion that TNCs had become important actors in an era of economic globalization and governmental focus on wealth creation. Arguments about the role of ideas and transnational "epistemic communities," or networks of professional with policy relevant knowledge within an issue area, also received focus. Economists garnered special attention as some rose from the ranks of advisors to become influential decision-makers.[7]

These theoretical debates help to define some of the key questions this chapter – focused on the international level of analysis -- will attempt to answer, including:

- Which commercial policy outcomes were influenced by coercion from or bargaining with other states? To what extent did foreign governments act alone or in collusion with their own domestic air carriers?
- Which states had the most impact on policy outcomes? Did the U.S. exert hegemonic power versus Taiwan and the Philippines?
- To what extent did international organization and regimes influence policy outcomes? Which commercial policy categories (trade, FDI, industry) were most affected?

The format of Chapter Seven is similar to previous chapters: the impact of state-state bargaining and international institutions in the Philippines will be examined first, followed by Taiwan, and then a comparison of both states. The commercial policies referenced in this chapter were shown in figures 3.6 and 3.12, respectively.

THE PHILIPPINES

State-State Bargaining

Most state-state bargaining involving the Philippine government centered on air service agreements (ASAs). Indeed, as outlined in Chapter Four, its institutional design placed most authority to develop ASAs with the President – including the power to appoint the Civil Aeronautics Board and the power to approve or veto negotiation results. ASAs were not in the realm of the "high politics" of national security, but they did receive a great deal of attention from the Philippine president. Air cargo, which was often an afterthought in ASA negotiations in the early 1990s, took on added significance as the decade progressed. The analysis that follows will highlight the most significant state-state interactions in the study period in order to understand the influence of other states on commercial policy outcomes. It is not surprising that bilateral international air service agreements are the key area of focus. The filter applied here is which ASAs were driven by diplomatic pressure or coercion from foreign governments? The analysis will show that in some cases the foreign government acted in concert with the desires of their own domestic interests, while in other cases the foreign government pursued an independent commercial policy agenda that was sometimes in conflict with its own domestic interests. Undoubtedly, many interesting interactions over the ten-year study period have been left out. The focus will be on the bilateral interactions that had most impact on air cargo commercial policy.

Singapore

Singapore was the most consistent and vocal Asian proponent of open skies in the 1990s. It embraced this policy before other Asian states, and also advocated FDI liberalization and customs reform throughout the region. Singapore pushed its agenda through active participation in an array of intergovernmental organizations, including the World Customs Organization, World Trade Organization, the Asia-Pacific Economic Cooperation, the Association of Southeast Asian Nations, and the Asia-Europe Meeting.[8] Critics contended that Singapore, as a small city-state removed from the main travel corridors to North America and Europe, was simply acting in its national interest by pursuing such a policy. Moreover, it boasted an award-winning airport (Changi) and an internationally competitive combination carrier (Singapore Airlines) that often acted in close coordination with the Civil Aviation Authority of Singapore, the government agency in charge of air service rights.[9]

Singapore completed or modified two cargo ASAs with the Philippines in the study period – in 1992 and 1994. Primarily corporate interests (Pacific East Asia Cargo and Singapore Airlines) drove both agreements, rather than the Singaporean government. A milestone was achieved in 1997 when Singapore signed an open skies ASA with the U.S. The ASA was one of the most liberal negotiated to date, with full 7th freedom rights and allowing each country's airlines the right to operate cargo hubs in each other's territory.[10] This was quickly followed with an open skies agreement with Brunei, the first within ASEAN.[11] In the same year, Singapore broached the subject of open skies with the Philippines. Singapore was very interested in liberal 5th and 6th freedom rights and establishing possible hubs in Cebu and at the Clark Special Economic Zone. The Philippines was interested in gaining air rights for Cebu Pacific, a passenger airline. The open skies discussions included direct contact between the Singaporean Prime Minister and President Ramos. According to a former Civil Aeronautics Board official, Singapore offered financial aid to Mindanao an incentive to conclude the deal.[12] The offer was rejected on the basis of Philippine Airlines opposition, divided opinion within the Philippine government, and fear that Singapore was simply acting on behalf of U.S. interests. Singapore's regional ambitions to use the Philippines as a transportation hub were thus thwarted.

Hong Kong

With its central location astride the rapidly expanding Chinese economy, PAL and the Philippine government considered Hong Kong to be a highly prized destination for air service rights. Like Singapore, Hong Kong had a world-class airport, outstanding customs operations, and a competitive flag carrier -- Cathay Pacific.[13] Hong Kong was the most popular international destination from Manila, and Philippine carriers had great interest in ASAs negotiated in 1993 and 1997. Generally, Pacific East Asia Cargo wanted to expand the 3rd and 4th freedom capacity of the Hong Kong-Manila corridor while PAL was more protectionist. Both carriers, however, were interested in establishing 5th freedom rights from Hong Kong to other destinations. Although the 1993 ASA was driven primarily by a Philippine interest (PEAC), the ASA in 1997 was highly influenced by international relations. The Hong Kong government wanted to establish a new baseline for cargo and passenger service before it became a special administration region of China. Previous ASAs had been negotiated with U.K. involvement. The agreement was unique in establishing clear delineation between cargo and passenger entitlements but did not include 5th freedom rights for Philippine carriers. Philippine Airlines, which had steadily lost market share on the Hong Kong-Manila route, was predictably opposed to the new ASA. In the end, it lost out to a coalition favoring the ASA that included the Hong Kong government, Cathay Pacific Airlines, the Philippine Civil Aeronautics Board, and Pacific East Asia Cargo.[14]

China

A 1997 ASA with China, a growing trading partner, was a long overdue upgrade to air transportation capacity between the two countries. The previous ASA negotiation had been completed in the 1970s and involved Philippine first lady Imelda Marcos.[15] The 1997 agreement added cargo destinations and routes for Philippine carriers, including an eager PEAC. However, it also gave Chinese carriers restricted 5th freedom rights from the Philippines to third countries – a benefit that Philippine carriers did not receive in return. Reciprocity – a key Philippine ASA negotiating principle -- was not achieved in negotiations with the Chinese government. A CAB official explained, "We had no leverage with China... their negotiators asked what can you [the Philippines] do for us?"[16] A contributing factor to conceding 5th freedom reciprocity may have been that Philippine carriers did not fear their Chinese counterparts, which were not internationally competitive in the late 1990s. Overall, China's posture towards aviation liberalization in the 1990s was conservative. The Chinese government recognized the allure of its market to foreign carriers, and often used it for leverage in ASA negotiations. This was the case with the Philippines.

New Zealand

The Philippines did not have an ASA in place in fellow APEC member New Zealand in the 1990s. A tentative agreement was developed after two rounds of negotiations in the mid-1990s but not finalized. Throughout the decade, New Zealand's air cargo commercial policy changed significantly to embrace a liberal framework. FDI restrictions were eased and the government embraced an open skies policy. By late 2000, 10 of New Zealand's 45 ASAs were open skies agreements for both cargo and passenger flights – including treaties with Asian neighbors Australia, Malaysia, Singapore, Brunei. The government viewed liberal air cargo rights as a trade creator.[17] The Philippines was an open skies target, and at the 1999 Asia-Pacific Economic Cooperation (APEC) summit, New Zealand's Prime Minister proposed an open skies agreement (including 5th freedom rights) to President Estrada. However, a coalition of the Philippine Civil Aeronautics Board, Philippine Airlines, and Air New Zealand spurned the New Zealand government's proposal. There are two interesting points gleaned from this incident. First, New Zealand's initiative represented a significant departure from the Asian norm that a flag carrier's interest receives priority in bilateral negotiations. According to a PAL executive involved in the negotiations, "The New Zealand government is very independent from its airlines—more than any country I have seen."[18] A second interesting point was that the Philippine negotiators did not apparently factor the potential benefits of trade creation into their decision. The New Zealand offer would have substantially cut the 40-hour travel time to South America, creating new opportunities for Philippine exports. Tuna from Mindanao, for example, could become a more viable export to the South American market for fresh fish. The Philippine Civil Aeronautics Board, however, was more concerned with the potential impact of Air New Zealand 5th freedom rights on PAL than trade creation. It does not appear that serious economic analysis was part of the Philippine rejection of the open skies offer.[19] New Zealand, like Singapore, failed in its bid to open Philippine skies for cargo services.

Australia

The Australian government pursued a path very similar to New Zealand in the late 1990s in pursuing air cargo liberalization. In 1997, Australia and the Philippines implemented an ASA liberalizing cargo service between the two countries, but not incorporating 5th freedom rights. Australian carrier Qantas was heavily opposed to the deal.[20] Two years later, based on a recommendation by the Australian Productivity Commission, the government unilaterally opened its skies for dedicated freighter aircraft. This policy meant that Australia no longer required reciprocal access from another state as a price for unlimited access to its airports. The government developed this policy against fierce opposition from Qantas and the Australian International Pilots Association. It is interesting to note that FedEx was a major proponent of the Australian government's decision, citing the need to optimize its Subic Bay hub operations and warning that Australia could get left behind economically if it did not liberalize cargo.[21] In late 2000, Australia signed a liberal open skies agreement with New Zealand that included 7th freedom cargo and passenger rights for Australian and New Zealand carriers.[22]

Brunei

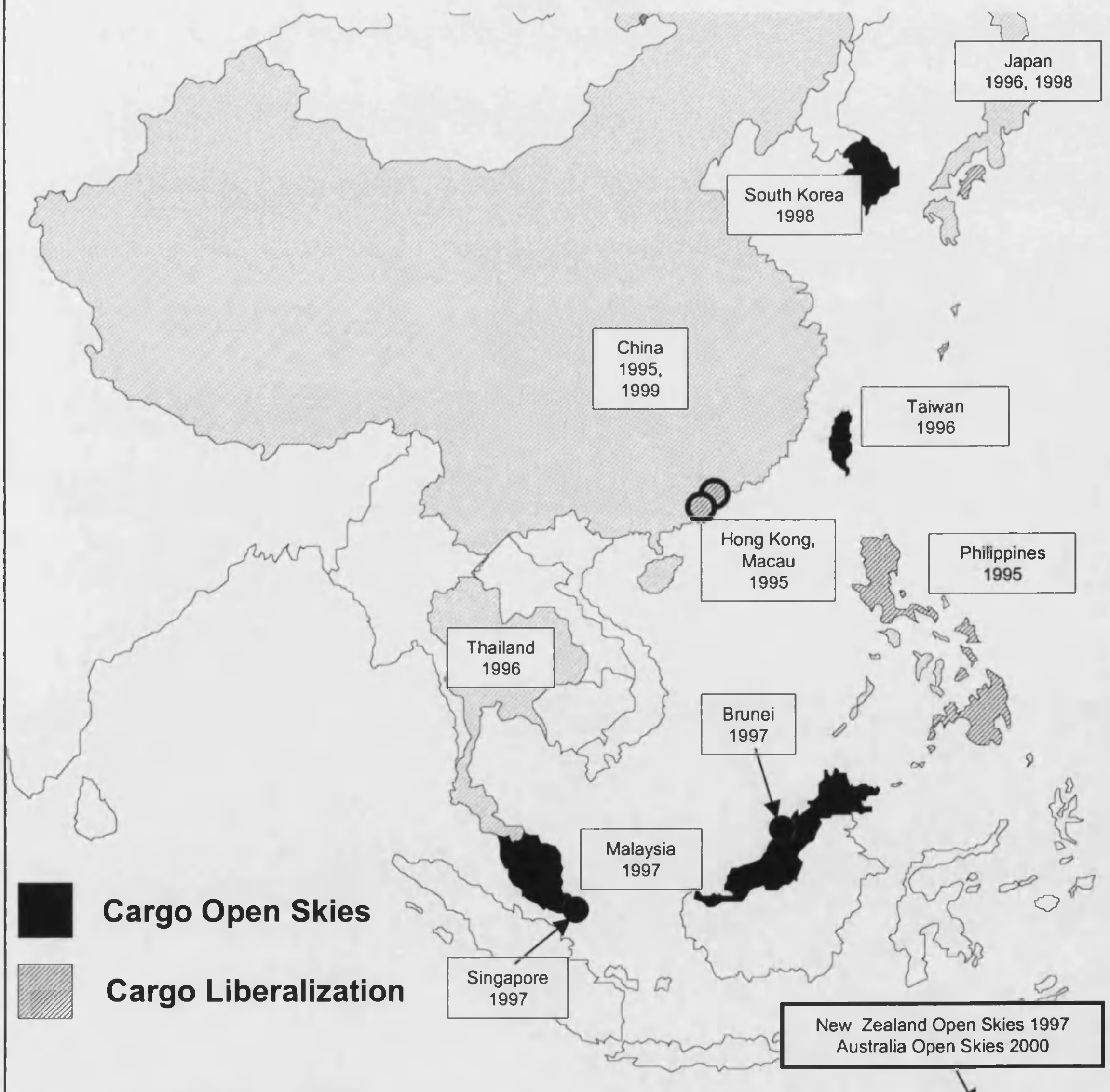
Brunei's Department of Civil Aviation was an active proponent for expanded air service rights with the Philippines. Focused on becoming a transportation hub in Asia, Brunei charted a course much like Singapore's – to upgrade infrastructure and increase air traffic to the small, relatively isolated state. In 1992, an ASA was concluded with the Philippines that added dedicated air cargo flights between the two countries. Both the Brunei government and a Philippine interest, Pacific East Asia Cargo (PEAC), were proponents of the agreement. As discussed in Chapter Four, Brunei became PEAC's second international destination in its bid to establish a broad Asian route structure. According to a PEAC executive, the agreement's prospects may have been aided by an offer of foreign assistance to the Philippines prior to negotiations.[23] The second agreement with Brunei came in the previously mentioned Brunei-Indonesia-Malaysia-Philippines East Asian Growth Area (BIMP-EAGA) multilateral open skies agreement -- a rare instance of a multilateral ASA in Asia. BIMP-EAGA, however, was mostly an ASEAN diplomatic gesture that included select cities in the southern region of the Philippines; it did not threaten PAL's core routes. The Brunei government also expressed interest in extending open skies to cover all of the Philippines. The offer was not acted upon. On the basis of Brunei's small size and economy, the benefits of such an agreement were not perceived as equal.[24]

The United States

The U.S. embarked on a very aggressive open skies policy in the early 1990s. While the initial American focus was on passenger flights, ASAs included more and more specific cargo rights as the decade progressed. This trend culminated in a 1996 ASA with Japan that focused only on cargo rights. The U.S. government's strategy was to move towards global aviation liberalization by adopting, in essence, a regional open skies strategy. Liberal ASAs were to be offered not only to large and important markets, but also to smaller countries if doing so would put competitive pressure on neighboring countries to follow suit. The ASAs were also to address the unique requirements of cargo services, including beyond rights, ground handling services, and infrastructure.[25] The U.S. open skies framework did not include cabotage for its huge domestic market.

The initial U.S. focus was on the European market. After completing its first open skies ASA with the Netherlands in 1992, 10 more agreements were completed by 1996. The focus then shifted to East Asia. The U.S. Department of Transportation wanted four or five successes in the region to gain critical mass, which would hopefully create pressure on restrictive countries like Japan and Korea.[26] The focus on East Asia came at roughly the same time that FedEx was negotiating with Subic Bay and Philippine government officials, adding to its bargaining position. U.S. Department of Transportation and State Department officials led the 1995 ASA negotiations, with FedEx and other air carriers as observers. Overcoming significant opposition from Philippine domestic interests (including Lucio Tan), the most liberal cargo ASA ever agreed to by the Philippines was completed. The ASA gave FedEx everything it needed to operate its Subic Bay hub – including liberal beyond rights, cargo self-handling, and change of gauge.[27] Thus, state-state bargaining did help FedEx in its efforts to establish an Asian hub. However, given FedEx's political clout and significant in-country support (including President Ramos), it is not clear that FedEx *needed* active U.S. government support to achieve its desired negotiation outcomes in this instance.

Figure 7.2: U.S. Air Service Agreements With Cargo Provisions East Asia, Australia, New Zealand 1993 - 1999



Source: U.S. Department of Transportation
Note: Liberalization is defined as expansion of available capacity, frequency, and/or number of carriers; Open Skies generally results in removal of constraints on these factors

The U.S. government did make a critical difference for FedEx in negotiations with Japan in 1995 and 1996. With the Subic Bay hub selected, FedEx needed Japan as an intermediate refueling and transshipment stop for flights to and from the U.S. After a series of hard fought negotiations between the U.S. Transportation Secretary and the Japanese Transport Minister, FedEx was awarded seven new routes beyond Japan, including to Subic Bay.[28] When Japan later shut down FedEx flights to the Philippines in a dispute over passenger rights, the U.S. government again assisted FedEx, elevating the issue to the presidential level.[29] Overall, the U.S. government made significant progress in its strategy in achieving Asian open skies in the late 1990s. As shown in figure 7.2, cargo open skies agreements were concluded with Taiwan, New Zealand, Malaysia, Brunei, Singapore, and South Korea; an open skies agreement with Australia was concluded in 2000, just after the study period. Agreements liberalizing cargo rights were also concluded with China, Hong Kong, Macau, and Thailand. And in APEC, the U.S. was a key protagonist for the world's first multilateral open skies agreement with Brunei, Chile, Singapore, and New Zealand. While most of the markets discussed thus far had significant business potential for U.S. air cargo interests, not all of the more than 40 U.S. open skies agreements in the 1992 – 2000 timeframe were negotiated for purely economic reasons. In 1999 and 2000, for example, the U.S. completed open skies agreements with an array of states with very limited business potential for U.S. interests, including Tanzania, Burkina Faso, Namibia, and the Netherlands Antilles.[30] In summary, the U.S. Government had its own commercial policy agenda that usually, but not always, supported the needs of its internationally competitive air cargo carriers.

Other States

The Philippine government had a few notable exchanges with other countries regarding air service rights. In 1992, the new Ramos Administration CAB broached the subject of open skies with the Netherlands in the wake of the groundbreaking U.S. – Netherlands agreement; the offer was refused. The Netherlands was one of only four countries, along with New Zealand, Singapore, and the U.S., that the Philippine government held serious open skies discussions with in the 1990s.[31] However, the Philippines did complete an ASA with the Netherlands in 1998 that increased capacity between the two states.

In 1999, an ASA that for the first time specified all-cargo flights was completed with Germany. The German government, along with German carriers Lufthansa and LTU, were protagonists. PAL was opposed to the agreement, but in the end gained a revenue-sharing agreement with Lufthansa for thrice weekly Frankfurt-Manila cargo flights. Without this arrangement, it is unclear that the ASA would have been approved – despite Germany's status as the eight largest export market in 1999.[32]

The British government responded to the request of Philippine carriers when it agreed to a 1996 ASA that added specific Philippine –U.K. cargo rights. This agreement was completed against the wishes of British Airways.[33] Finally, there is no evidence of significant discussions with the Belgian government, despite DHL's strong interests in the Philippines.

While hard to quantify with precision, roughly one-quarter of the 23 air cargo ASAs documented in this research were fully or partially instigated by other state governments, often in coordination with their own domestic air carriers. Brunei, Australia, New Zealand, the United States, and Singapore were among the most active states in bargaining with the Philippines. All five pursued some form of aviation liberalization, with Australia and New

Zealand sometimes acting against the wishes of their own air carriers. Singapore and New Zealand were unsuccessful in their attempts to forge open skies with the Philippines, while the U.S. successfully concluded an ASA that was a modified version of open skies. Three other states (Japan, China, and Hong Kong) were not instigators ASA negotiations, but played a significant role in bargaining outcomes by promoting the interests of their domestic carriers.

International Organizations And Regimes

The Philippines is a member of a number of international institutions with the potential to influence sectoral policies in general and air cargo policies in particular. It is a member of two regionally oriented intergovernmental organizations: the Association of Southeast Asian Nations (ASEAN) and the Asia-Pacific Economic Cooperation (APEC). The Philippines is also a member of the World Customs Organization (WCO), the International Civil Aviation Organization (ICAO), and the World Trade Organization (WTO).

The attitude at the end of the Ramos Administration was very optimistic that Philippine participation in international organizations would be an impetus for continued economic reform. Antonio (1997) captured the prevailing mood:

> One factor that will keep Philippine industrial policies on a path away from direct market intervention and towards greater reliance on market mechanisms is the enormous pressure from the emerging global environment. For example, since the Philippines is already strongly committed to the WTO, the ASEAN Free Trade Area, and the APEC, a sudden turnaround in policy orientation seems difficult.[34]

These sentiments proved to be optimistic – at least for air cargo commercial policy.

Association of Southeast Asian Nations

The Philippines was one of five founding members of The Association of Southeast Asian Nations (ASEAN) in 1967, along with Indonesia, Malaysia, Singapore, and Thailand. The addition of Brunei in 1984 created a core group of six members, which was later expanded to include Vietnam, Cambodia, Laos, and Myanmar in the late 1990s. While ASEAN had historically focused primarily on political issues, it took on a greater economic role with the push for an ASEAN Free Trade Area (AFTA) by 2002 for the core six members.[35] The focus of this initiative, however, did not include trade in services. ASEAN was therefore mostly a talking shop for commercial policy issues related to air transportation.[36]

Despite its institutional limitations, ASEAN's annual meetings for Heads of State and economic ministers did provide forums for aviation policy discussions between members. In one case, a Heads of State meeting involving President Ramos provided the impetus for a liberal air service agreement (BIMP-EAGA) between select cities in Brunei, Indonesia, Malaysia, and The Philippines in 1995.[37] This agreement was one of the few examples of an ASA driven by the Philippine president without the involvement of a domestic air carrier. Its primary aim was political – points of access were mostly secondary cities in economically depressed regions; economic centers Jakarta, Kuala Lumpur, and Manila were all excluded from the agreement.[38] For President Ramos, however, the agreement offered some tangible proof that he was serious about improving the economy in the troubled Mindanao region.

A Heads of State meeting held in December 1998 generated the Hanoi Action Plan, which proclaimed the need for further liberalization of aviation services in the region. The Hanoi Action Plan, however, only called for the articulation of a "policy framework and modalities…for the development of Competitive Air Services Policy which may be a gradual step towards an Open Sky Policy." While the Hanoi Action Plan articulated a long-term vision for liberalization of air transportation, it left governments with complete freedom to choose their own path towards that end.[39] Here, the paths of ASEAN members diverged. Singapore, Brunei and Malaysia had adopted an "open skies" bias by the late 1990s, while Indonesia, The Philippines, and Thailand generally favored more restrictive air service rights. Thus, the potential for ASEAN and AFTA to provide a framework for air cargo policy coordination was limited, despite growing trade and economic interdependence between member countries. Most member states had more liberal air service rights with the United States than between each other.

Finally, there were occasional meetings between the ASEAN Directors General of Customs. A meeting held in September 1996 in Jakarta generated a proclamation for harmonized customs tariff nomenclatures and procedures. ASEAN created a document called "Customs Vision 2020" that established a framework for progressive regional customs reform. Overall, ASEAN had limited influence on air service rights of member states, but a growing role in customs reforms. As discussed in Chapter Six, the U.S. –ASEAN business council (a U.S. trade association) sought to elevate the influence of ASEAN in the late 1990s through an education program on the economic benefits of air cargo service for ASEAN bureaucrats and government officials from member states. UPS and FedEx were key members of the organization.[40]

Asia-Pacific Economic Cooperation

In 1989, leaders from states throughout the Asia Pacific region established the Asia-Pacific Economic Cooperation (APEC) forum. In addition to the Philippines and Taiwan, members included key trading partners such as Australia, Canada, China, Hong Kong, Indonesia, Japan, Korea, Malaysia, New Zealand, Singapore, Thailand, and the United States.[41] In 1994, APEC leaders pledged in the Bogor Declaration to achieve the goal of free and open trade and investment in the Asia-Pacific region no later than 2010 for industrialized economies and 2020 for developing economies. This pledge defined a framework for transportation liberalization and customs simplification and harmonization.

There were three forums within APEC that played formal and informal roles in aviation policy outcomes: 1) a transportation working group that addressed aviation-oriented issues, 2) a sub-committee on customs procedures (SCCP) that addressed some issues germane to air cargo, and 3) an annual APEC summit between Heads of State of member countries. Recognizing the critical role of TNCs, APEC leaders also established a business advisory council as their permanent business consultative group.[42] FedEx and UPS were both members of this group.

In the spirit of the Bogor Declaration, the transportation working group in 1995 identified a number of areas where aviation could be liberalized, including ownership and control, freight, multiple designation agreements, and market access.[43] There was little progress against these principles, however, due to very different positions of member states. The U.S. and Singapore, for example, were major open skies advocates while Japan and China favored more restrictive policies. In 1999, a pro-liberalization block formed between Brunei, Singapore, Chile, Australia, New Zealand and the U.S.; a common denominator of this group is that all members had completed or were involved with open skies negotiations with the U.S. According to a TNC executive involved with the transportation working group, "the existence of this block was proof that the U.S.'s divide and conquer strategy worked."[44] All members of this block except Australia were to sign the world's first multilateral open skies agreement in the following year.[45] The Philippines, however, was pursuing a protectionist aviation policy at the time and was therefore not influenced by the APEC transportation working group. Had the open skies block been in existence during the Ramos Administration, the outcome may have been different.

The second APEC forum, the sub-committee on customs procedures (SCCP) working group, was formed in 1994 and by 1996 developed a nine-point collective action plan. In the same year, the SCCP received critical input from the APEC business advisory council, which documented the shortcomings in customs procedures in member states. Among the findings: an average international trade transaction included 27 – 30 different parties, 40 documents, 200 data elements, and re-keying of 60-70% of all data at least once. Among the business advisory council's recommendations were for APEC members to adhere to the WTO Customs Valuation Agreement by 1997, and to implement an APEC-wide electronics customs processing system by 2000.[46] To help address these shortcomings, the U.S. successfully pushed for inclusion of World Customs Organization Customs Guidelines for Express Consignments Clearance in the SCCP collective action plan at a 1997 APEC meeting in Vancouver. The U.S. and China took responsibility for its implementation, with assistance from the International Express Carriers Conference – the industry association formed by FedEx, UPS, DHL, and TNT.[47] The key needs of air cargo integrators, with the assistance of the U.S. Government, were now on the APEC agenda.

The Philippine Bureau of Customs signed a memorandum order in 1998 to partially implement the Express Consignment Clearance guidelines, but left out key elements that would have required congressional approval or would have reduced the tariff revenues – such as a de-minimus provision that eliminated tariffs for low-value shipments. This provision was very important to integrators to speed customs clearance, but as a customs official noted, tariff revenues are the second largest source of government revenues in the Philippines.[48]

The third APEC forum that could potentially influence commercial policy was the annual summit between heads of state of member countries. The 1999 APEC Summit, for example, was the venue where the Prime Minister of New Zealand offered open skies to President Estrada; the offer was later rejected. Ironically, the 1996 APEC Heads of State Summit was held at Subic Bay, putting it on the map as part of "The Philippine Miracle" and attracting the interest of TNC investment.

Overall, the Philippine issue area most affected by APEC was harmonization of customs standards. The organization had less influence on air service rights, as the Philippines chose not to participate in the six-member open skies block.[49]

World Trade Organization

The GATT Uruguay Round of Trade Negotiations led to a General Agreement on Trade in Services (GATS) that came into effect on January 1995. Many important aspects of air cargo commercial policy, including air traffic rights and "services directly related to the exercise of these rights" were excluded from the GATS Annex on air transport services. The Annex focused on less controversial areas such as computer reservation systems, marketing, and maintenance.[50] The World Trade Organization (WTO), however, did have an impact on a customs valuation policy. As part of Uruguay Round commitments, the WTO established a Valuation Agreement with the objective of developing transparent and consistent standards for the determination of the value of imported goods. This was a very important issue to air cargo TNCs, as the subjective and inconsistent determination of import value and tariffs – which differed between states and even customs agents -- was a major source of delays in customs clearance. It also provided motivation for bribes and kickbacks to customs officials to keep valuations (and tariffs) as low as possible.[51] The target date for implementation of the Valuation Agreement was 1997. After a lengthy phase-in period, the Philippines implemented reforms mandated by the WTO Valuation Agreement in December 1999.[52] While the Valuation Agreement is fairly narrow in scope, WTO attempted to broaden its influence on customs policies through a trade facilitation agenda established at the 1996 Singapore Ministerial Conference. This initiative, however, had difficulty in gaining momentum as some WTO members felt that broader customs reform measures were best left to the World Customs Organization.[53]

Freight forwarding services are also on the WTO agenda, although not within the Annex on Air Transport Services. They are covered under Postal and Courier Services (and subsector of communications services) and Maritime Transport Services. The definitions of these services as they relate to air cargo and integrated air service are, by the WTO's own admission, ambiguous and subject to interpretation to members.[54] One air cargo integrator complained that within the Postal and Courier Services category, the ground element of air express service is grouped along with bicycle courier service, and is therefore a major obstacle to air cargo liberalization.[55] These caveats aside, the Philippines agreed to allow 100% foreign ownership of freight forwarding and ground handling service companies as part of its Postal and Courier Services commitments in the Uruguay Round in 1993. The Philippines was one of only 33 WTO members that made commitments on courier services, and of this group, one of only 13 members to allow full commercial presence for these services.[56] Notably, this commitment did not affect the law forbidding any foreign ownership of a customs brokerage service – a service often provided by freight forwarders and integrators. This created ambiguity regarding the legality of a foreign interest to purchase a Philippine freight forwarding firm. Overall, the WTO appeared to have a tangible impact on two commercial policies – customs valuation and FDI limitations for freight forwarding, ground handling services, and cargo terminal services.

World Customs Organization

The Philippines is a member of the World Customs Organization (WCO), a Brussels-based IGO with more than 150 members. The major successes of the WCO over the study period included an agreement to harmonize classifications for goods, and a 1999 revision to the Kyoto Accord, which simplified and standardized customs procedures. While the WCO is officially an intergovernmental organization, it also depends heavily on participation from TNCs, including air cargo firms. It is not surprising that the "big four" integrators played an instrumental role in developing WCO standards. The four TNCs formed the International Express Carriers Conference, also based in Brussels, to act as a pressure group on the WCO. They viewed joint cooperation on customs reform as a means of advancing a mutual interest while continuing their fierce rivalry based on other commercial factors. As a result, WCO guidelines for express shipments developed in the mid-1990s as a joint effort between the WCO and IECC. The two organizations even hosted regional seminars in Thailand (1995) and China (1996) to educate member countries and the requirements for express shipments. New Zealand was an early adopter of express guideline principles, known as "WCO Express Guidelines."

Despite the progress of the WCO in developing customs procedures and standards, it does not appear that it had a significant effect on most air-cargo specific customs reforms cited in this research. The Philippines, for example, was not a signatory to the Kyoto Accord that standardized customs procedures. Difficulty in obtaining congressional approval for changes in tariff and customs laws was a key obstacle.[57] One partial WCO success was the Philippine decision to implement some (but not all) elements of the WCO Express Guidelines in the late 1990s. One of the guidelines not implemented was the requirement to abolish customs tariffs for low value goods as a means of speeding express customs clearance; the inability to replace lost customs tariffs with other revenue sources was one obstacle to its implementation.[58]

Overall, it appears that international organizations had a secondary role in Philippine air cargo policies in the 1990s. While they did not affect policy decisions related to air service rights, they did play a tangible role in customs reform and changes in FDI limitations.

TAIWAN

State-State Bargaining

Like the Philippines, most state-state bargaining in Taiwan centered on air service rights. Taiwan's status as a *de facto* state, however, changed both the political context and the communications channels for these interactions. As the subsequent analysis will show, China's influence permeated many ASA negotiations with other states. Taiwan usually utilized unofficial diplomatic channels to avoid branding the ASAs as official state-state treaties.[59] As a result, air carriers were often communications conduits for ASA negotiations. The following analysis will highlight some of the more important and revealing state-state bargaining that affected air cargo policy outcomes in the study period.

China

One of the most influential states on Taiwan's air service rights was China, a state that did not have official or significant unofficial diplomatic relations in the study period. The broader political context of this relationship and the ban of direct transportation links were already reviewed in Chapter Three. China's primary concern was that air service agreements did not bestow international legitimacy on Taiwan. This meant that China was opposed to flag carriers from other states (carrying passengers or cargo) operating direct flights to Taiwan. In some cases, flag carriers set up dummy corporations with an alternative name and livery to avoid China's ire; KLM, British Airways, Lufthansa, Qantas, and Air France are all examples this approach. British Airways, for example, created "British Asia" to fly cargo to Taiwan. Lufthansa was fortunate to already owned a cargo subsidiary (Condor) with a different name.[60] While these examples were more procedural inconveniences than air cargo policies, Chinese political pressure may have prevented the *possibility* of Taiwan completing air service agreements with some states. One example is India, where Chinese political pressure may have contributed to the inability of Taiwanese carriers to obtain landing slots from the Indian government. Without landing slots to trade, no ASA was signed between Taiwan and India in the study period. [61] In another example, Russian concern about the phonetic similarity of China Airlines (a Taiwanese firm) and Air China (a Chinese firm) may have contributed to Taiwan's failure to achieve an ASA after years of negotiations.[62] The significance of these examples is that the "high politics" of international affairs either prevented or deterred air cargo links with India, Russia, and China – three states with more than two billion consumers and enormous long-term air cargo business potential. The largest economy in Asia – Japan – also kept China appraised of its ASA negotiations with Taiwan to avoid surprises that could affect their bilateral relationship.[63]

Singapore

The city-state of Singapore was clearly one of the most vocal aviation liberalization advocates in Asia, as reviewed earlier in this chapter. The Civil Aviation Authority of Singapore and Singapore Airlines combined efforts to push aviation liberalization throughout Asia, and Singapore was part of the pro-liberalization block within APEC that also included New Zealand, Malaysia, Brunei, the U.S., and Australia. However, Singapore Airlines was the main proponent for a liberal 1995 ASA with Taiwan. The ASA included significant capacity expansion and limited intercontinental 5th freedom rights. Singapore Airlines' approached the Taiwanese Civil Aviation Authority shortly after Transportation and Communication Minister Liu's open skies declaration in 1995. Despite opposition by domestic carriers CAL and EVA to complete open skies, the ASA resulted in significant liberalization of this heavily traveled air corridor.[64]

Australia

Australia's open skies declaration in the late 1990s provided Taiwan a rare opportunity for air cargo liberalization at the behest of another state and laid the groundwork for the liberal 1998 Australia-Taiwan ASA, an agreement that removed most restrictions for freighter traffic to Australia. The ASA was a manifestation of the Australian government's aggressive initiative to reform its aviation sector in the late 1990s. Among the reforms were privatization of state carriers Qantas and Australian Airlines, loosening of airline FDI restrictions, comprehensive airport privatization, and progressive air service rights liberalization. Foreign carriers were offered unrestricted access to all international airports except Sydney, Melbourne, Brisbane, and Perth; all airports offered unrestricted access for dedicated freighter aircraft.[65]

In the 1998 ASA negotiations, the Australian Government offered Taiwan an open skies framework that included 5th and 6th freedom beyond rights. Taiwan turned down the offer, as its own definition of open skies focused more on 3rd and 4th freedom rights. There was also recognition that and Australian carriers like Qantas would benefit more from beyond rights than Taiwanese carriers.[66] China Airlines wasted little time in taking advantage of the new ASA; it initiated freighter service between Taipei and Sydney in mid-1999.[67] In the same year, EVA initiated a codeshare agreement with Qantas with unlimited freight capacity between the two countries.[68]

Malaysia

A 1997 ASA with Malaysia is a rare instance of an agreement conducted almost exclusively by state-state bargaining with little involvement from air carriers. The impetus of the agreement was the Malaysian Transport Minister, who worked with his Taiwanese counterpart following a discussion at an APEC meeting. Malaysia had recently embarked on its own open skies policy and completed an open skies ASA with the U.S. in June 1997. The agreement included no limitations on 3rd, 4th freedom cargo flights and regional 5th freedom flights. A limit of 17 "intercontinental" beyond flights per week was also part of the agreement.[69]

The United States

The U.S. Government played an important role with a number of air cargo policy outcomes in Taiwan. These included the 1998 open skies ASA, Taiwan's decision to allow UPS and FedEx to operate their own distribution facilities at CKS airport, and Taiwan's decision to privatize and expand CKS's cramped air cargo infrastructure. Overall, the U.S. was the most influential state in influencing Taiwan's air cargo policies in the study period.[70]

The previously discussed U.S. open skies initiative in East Asia was in full swing just as UPS was negotiating with Taiwan to establish an air cargo hub in 1996. Open skies or liberal revisions to ASAs had recently been completed with Hong Kong, The Philippines, Thailand, Japan, Singapore, and Brunei. While these ASAs did not force Taiwan to cave in – Taiwan was already seeking to liberalize through the Asia Pacific Regional Operations Center initiative – they did aid UPS' bargaining position to include cargo open skies and 24-hour customs in the Taipei hub. An official from the American Institute of Taiwan (the unofficial embassy) summarized the reasons for the policy change: "The open skies ASA resulted from a confluence of U.S. interests and the general APROC policy."[71]

Finally, it appears that the U.S. government assisted UPS, and later FedEx, with their requests that they be granted their own private distribution facilities (with their own customs units) at CKS airport – a privilege not enjoyed by any other foreign air carriers. Intertwined with this demand was U.S. government pressure for Taiwan to privatize, expand, and upgrade CKS air cargo facilities. The role of UPS and FedEx in lobbying for these policy changes was outlined in Chapter Five. Their efforts were supplemented by U.S. government pressure communicated through the American Institute in Taiwan after initial efforts to secure facilities were spurned by the Taiwanese government in the mid-1990s. If Taiwan did not grant exclusive FedEx and UPS facilities, the U.S. threatened to cease use of similar cargo terminals used by CAL and EVA in New York and Los Angeles. In addition, the U.S. threatened to end the temporary air rights enjoyed by Taiwanese carriers to Miami, Chicago, and Atlanta.[72] These threats directly impacted the interests if not the strategies of CAL and EVA, strengthening the bargaining positions of UPS and FedEx. Ultimately, both TNCs were successful in their negotiations with Taiwan and received their own facilities in 1996 and 1997, respectively. Overall, U.S. government pressure was very instrumental in forging an open skies agreement and securing facilities for UPS and FedEx at CKS International Airport.

Other States

Taiwan entered into ASAs with a number of Eastern European states following the end of the Cold War. Most of these ASAs did not contain cargo specific provisions with the exception of Bulgaria in 1992. The Bulgarian government pushed for this ASA, along with various Bulgarian domestic interests. Taiwan accommodated the request and signed an ASA, but as of the late 1990s, no carrier was flying direct Taiwan-Bulgaria cargo flights.[73]

Taiwan also terminated all direct flights with South Korea in 1992, as a result of South Korea's official diplomatic recognition of China. While this action was clearly driven by international politics, the Taiwan Ministry of Foreign Affairs was the instigator, not the

South Korean government. Despite support to re-establish links from interests in both countries, air cargo links still had not been re-established by 1999, the end of the study period

A 1999 ASA with Thailand also had the fingerprints of the Thai Civil Aviation Authority. Although CAL and EVA were the chief protagonists and had long pushed for air cargo liberalization with Thailand, the 1998 Asian economic crisis motivated the Thai government to liberalize air services against the wishes of flag carrier Thai Airways. The agreement featured a large increase in allowable cargo capacity and limited 5th freedom rights. The ASA was not open skies, but not for the lack of effort by Taiwan. "We would enter into open skies with Thailand if we could," according to a Taiwanese CAA official, "it would be an ideal stopping point for our carriers to Europe."[74] Apparently, objections by domestic interests limited how far the Thai government could pursue liberalization.

The Belgian Trade Office and EVA both lobbied for an ASA establishing direct cargo links between the two countries in 1995. The ASA allowed four passenger or cargo flights per week and designated Sabena (operating under the name Sobel Air) and one Taiwanese carrier. EVA later won the rights.[75] It is interesting to note that DHL was not a designated carrier by the Belgian government in this agreement. At the time, DHL was a 20% owner of PEAC in the Philippines, which already flew direct Manila-Taipei routes.

Finally, Chapter Four pinpointed an interesting anomaly in air service rights with Japan. Why would Taiwan's third largest export market, worth nearly $12 billion per year, allow only one dedicated air cargo flight per week? According to the Taiwan Civil Aviation Authority, negotiations were held with Japan throughout the 1990s to liberalize air capacity, without success. The Japanese Civil Aviation Bureau resisted Taiwan's overtures, citing limited landing slots in Tokyo as one reason that capacity could not be expanded. The only fruit from these negotiations was an increase in the number of passenger flights.[76] David Woods offers an interesting perspective of why Japan behaved this way when he noted:

> Japan is a reluctant player in air cargo liberalization with a heavy interest in protecting some big, traditional air cargo companies, which have hardly moved in terms of service and productivity for years. Japan tends to budge only in response to U.S. bilateral pressure.[77]

Overall, state-state bargaining had the most influence on the air service agreement issue-area. The most active national governments, including the U.S., Singapore, and Australia, were similar to those identified in the Philippine analysis. China also played a very influential role, but on an indirect basis by sometimes influencing the negotiating posture of other states.

International Organizations and Regimes

As a *de facto state* barred from the United Nations, the World Customs Organization, and normal bilateral relations with most states, Taiwan treated its membership in international organizations very seriously. They not only aided Taiwan's political objective of overcoming China-imposed isolation, but also provided valuable economic benefits that extended beyond freer trade. Indeed, Taiwan's drive to be a "good citizen" in APEC and to be considered worthy of WTO induction had ramifications for air cargo commercial policy.

Asia Pacific Economic Cooperation

Taiwan was an original Asia-Pacific Economic Cooperation (APEC) member under the name "Chinese Taipei" and active participant in the sub-committee on customs standardization (SCCP). Participation in the SCCP took on added significance with Taiwan's Asia Pacific Regional Operations Center initiative and associated pressure from the Council for Economic Planning and Development, FedEx, and later UPS to adopt world class customs procedures.

Participation in the APEC SCCP provided a unique opportunity to benchmark customs practices with other states. Taiwan received valuable information from the customs bureaus of a number of other APEC members, including Singapore, Australia, and the U.S. This helped to lay the groundwork for Taiwan's 1997 policy of customs streamlining that began implementation of the WCO Guidelines for Express Customs Clearance. In 1998, Taiwan leveraged its relationship with fellow APEC member Australia to develop cross-border electronic transmission of customs data. UPS branches in Taipei and Sydney were used in this effort, and UPS was offered the potential for customs clearance in flight – a key need of air cargo integrators.[78] The Bureau of Customs clearly considered participation in SCCP to be very important. Participation included the Director General and Assistant Director General of the Bureau of Customs.[79]

Taiwan also participated in the APEC transportation committee. Although this mostly a forum for exchange of ideas by transportation ministers, the 1995 transportation committee meeting in Victoria, Canada helped to influence Taiwan's Minister of Transportation and Communication to push for adoption of an open skies policy later in the same year. As previously mentioned, APEC also provided a venue discussions between Malaysia and Taiwan that ultimately led to a liberal ASA in 1997.

World Trade Organization

Taiwan had observer status in the World Trade Organization, but sought to implement some provisions of GATS in advance to improve its chances of eventual memberships. Two had direct relevance for air cargo policy. The first was a 1997 policy change to implement the WTO Valuation Agreement per A-VII of the GATT 1994 agreement. The second policy change was to increase allowable limit of foreign ownership of freight forwarding, ground handling, and cargo terminal operations to 50%. These changes in FDI limits were a result of Taiwan's bilateral WTO negotiations with Switzerland, and led to a change of Article 49 of Taiwan's Civil Aviation Law in 1998.[80] Support for WTO accession in Taiwan was very strong – it was supported by all three political parties and by public opinion.[81] One WTO official noted that, "Taiwan, more than any other country, were keen to join the WTO...as a result, Taiwan has one of the most liberal GATS agreements."[82] Taiwan's Council of Economic Planning and Development wasted no time in supporting WTO requirements, including FDI liberalization and customs reform, as part of its Asia Pacific Regional Operations Center (APROC) initiative. Of the 75 laws selected for the second stage APROC implementation in 1997 (most unrelated to air cargo), 21 were directly related to WTO accession.[83] According to a CEPD official involved with APROC, "The WTO gave us ammunition versus legislature...they couldn't change one clause in the agreement."[84]

Overall, it appears that in spite of limited opportunities for participation, international organizations had tangible influence on some commercial policies in Taiwan – particularly those related to customs reform and FDI. Taiwan's unique status as a *de facto* state undoubtedly contributed to its enthusiasm for implementing some of the reforms.

COMPARISON OF THE PHILIPPINES AND TAIWAN

What have we learned from this chapter about the influence of state-state bargaining and international institutions on commercial policy outcomes in the Philippines and Taiwan? Overall, there were more similarities than differences between the two states.

One similarity is that air service agreements were the air cargo issue area most affected by state-state bargaining. This is not surprising – as defined by the Chicago Convention, air service agreements were a product of bilateral negotiations between governments. While this research documents a slightly larger number of ASAs (24) involving specific air cargo provisions in Taiwan than the Philippines (23), it does not appear that state-state bargaining had a discernibly different impact on the policy outcomes of the two states. Other categories of air cargo commercial policy, including FDI and industry policy, were largely unaffected by state-state bargaining with the exception of U.S. government demands for air cargo terminal space for UPS and FedEx at CKS International Airport.

A second similarity is that variations in state political power appear to explain some of the ASA bargaining outcomes. The United States, a hegemonic power, enjoyed the greatest influence on policy outcomes in both countries. Not only did the U.S. negotiate the most favorable cargo air service agreements in both countries (including beyond rights and provisions for hubbing), but it was able to win important concessions in ground handling and allowing FedEx and UPS to establish their own distribution centers in Taipei. The U.S. government went beyond bilateral negotiation to pursue a strategy of regulatory arbitrage – open your skies or risk losing cargo and passenger traffic to your neighbor that does. With a few exceptions, the U.S. policy was a success.[85] Asked why the U.S. was the only country to get unilateral concessions and a liberal air service agreement, a former Philippine Civil

Aeronautics Board member involved with ASA negotiations responded, "Its all about power -- we can push around Taiwan, but not the U.S."[86] China, another regional power, also received important unilateral concessions from the Philippines and may have influenced the actions of some other states in their negotiations with Taiwan.

While China and the U.S. exerted influence, other states with important economic ties but less political influence enjoyed less success in influencing commercial policy. Singapore, an important trading partner for both the Philippines and Taiwan, mostly met resistance in its attempts to assume the mantle of aviation commercial policy leadership. Similarly, two Japanese air cargo carriers (NCA and CLA) were unable to establish a significant air cargo business in the Philippines despite political intervention at the highest levels of government. Considering that Japan was the Philippines' second largest export market, this was a notable rebuke. The Philippines also severed direct air links with its third largest export market (Taiwan) in 1999, with significant economic consequences. Finally, the home countries of the two non-U.S. air cargo integrators -- Belgium (DHL) and The Netherlands (TNT) -- kept a low political profile despite unfavorable and in some cases unfair treatment in the region. DHL, despite its status as the world's most global company, was unable to secure its own facility in Taipei and was arguably coerced out of the Philippines. It is unlikely that the U.S. government would have adopted a similar political approach had the same thing happened to UPS or FedEx.

A third similarity between Taiwan and the Philippines is that international institutions played an influential and growing role in air cargo-related customs reforms and FDI policies. In many respects, customs is an issue area that is well suited for international institutions. States, as well as TNCs, benefit from the establishment of common standards and procedures, particularly as global supply chains proliferate as described in Chapter Two. In addition, sharing data in common formats become a necessity to reduce customs clearance time. It is therefore not surprising that most international relations relative to customs activity are through international organizations, rather than bilateral state relations. The WCO, APEC, ASEAN, and WTO all played a role in developing customs standards that were fully or partially implemented by the Philippines and Taiwan. Ironically, TNCs appear to have reached the same conclusion as governments with regard to the importance of international organizations – it is better to cooperate than operate outside of these organizations. The example of the big four integrators combining forces to create an interest group (International Express Cargo Convention) based in the same city (Brussels) as the World Customs Organization is illuminating, and was apparently successful as based on their influence in developing WCO Express Guidelines. This research also documented similar cooperation among air cargo TNCs at the state level in the Philippines as well as extensive participation in other international organizations, such as APEC.[87] In a 1999 speech, the FedEx Vice President of Freight Marketing noted that:

> What success we *have* enjoyed (relative to global harmonization of customs requirements) has been due to the work of the WCO and WTO. It was under their guidance that a glossary was created of international customs norms, setting the groundwork for commonality of a language.[88]

In the same speech, he noted that the weakness of the WCO was its inability to enforce international standards, particularly related to the Kyoto Convention.

Overall, one can argue that international organizations and the big four air cargo integrators defined much of the air-cargo customs policy agenda in the Philippines and Taiwan. While national decision-makers retained sovereignty to implement particular reforms, the menu of available policies was increasingly driven by a growing cooperation between international organizations and air cargo TNCs.

While there were a number of similarities between the Philippines and Taiwan, there was one notable difference: it appears that international organizations and institutions had a somewhat stronger influence on air cargo policy outcomes in Taiwan than the Philippines. Although Taiwan had a limited scope of participation in international organizations, it enthusiastically embraced opportunities for air cargo policy reform when they appeared, particularly in customs reform and FDI policies. The reason goes beyond Taiwan status as a de-facto state and desire to obtain WTO admission; Taiwan had a clear, coherent policy on air cargo, with central institutions able to deliver. International organizations could therefore be leveraged effectively as part of a *domestic* reform strategy (i.e., APROC). This didn't happen in the Philippines due at least partly to weak domestic institutions. A final reason that international organizations had a greater influence in Taiwan was related to financial resources. In many cases, it could afford to implement reforms that were beyond the reach of the Philippines – particularly in customs. The financial impact of customs reforms included two elements. The first was the cost to implement new customs procedures – hardware, software, training, and facilities. The second was related to loss of government revenue through reduced customs tariffs. The Philippines generally depended on outside aid to fund the first and could not afford or lacked the political will to deal with the potential loss of tariffs due to cargo-friendly policies such as raising the de-minimus threshold or customs collection.

With the international level of analysis now complete, the focus now turns to the concluding chapter of this research. The objectives will be to synthesize the findings from Chapters Four through Six and ascertain the theoretical implications of this research.

NOTES

[1] Krasner (1983)., p 2.
[2] Nayar (1995), pp 140-141.
[3] See Young (1980) and Krasner (1983).
[4] Keohane (1984).
[5] Nayar (1995), p. 143.
[6] See Putnam (1988); Keohane and Milner (1996), Milner (1997); and Moravcsik, Andrew, *"Integrating International and Domestic Theories of International Bargaining,"* in Evans *et al* (1993).
[7] See Haas (1992), Henderson (1998), and Williamson (1994).
[8] For the participation in international institutions by the Customs & Excise Department see http://www.gov.sg/customs/ced/mainced14.html.
[9] Changi won the "Best Airport" award for Asia by *Cargonews Asia* every year over the 1987 – 2000 timeframe. See http://www.caas.gov.sg/award
[10] U.S. Department of Transportation Press Release, 23 January 1997
[11] *Travel News Asia*, 7 July 1997
[12] Interviews. An execution of a Filipino domestic servant in Singapore may have also contributed to the failure.
[13] The Hong Kong International Airport at Chek Lap Kok handled more international cargo shipments than any other airport in the 1999 – 2000 timeframe. See *Aviation Week & Space Technology*, 23 October 2000.
[14] Interviews. Hong Kong's protectionist posture for flag carrier Cathay Pacific contributed to the inability to obtain 5th freedom rights.
[15] Interview.
[16] Interviews.
[17] The ASA figures were cited in a speech by New Zealand Transport Minister Mark Gosche to the Association of Asia Pacific Airlines in November, 2000. In the speech, he also argued the case for loosening FDI restrictions on air carriers. See http://executive.govt.nz/speech.
[18] Interview.
[19] Interviews, The Freedom To Fly Coalition.
[20] Interviews. Qantas lacked dedicated cargo aircraft and was concerned about PAL using 5th freedoms for passenger flights originating in Australia.
[21] *Cargo News Asia*, 21 June 1999. Also see Productivity Commission (1998).
[22] Joint press release by Mark Gosche (New Zealand Minister of Transport) and John Anderson (Deputy Prime Minister of Australia), 20 November 2000.
(http://www.executive.govt.nz/minister/gosche/open_skies/joint_pr.html). Accessed January 2001.
[23] Interview. For a discussion of Brunei's goal of becoming a regional transportation hub, see http://www.civil-aviation.gov.bn
[24] Interviews.
[25] U.S. Department of Transportation, *International Air Transportation Policy Statement*, April 1995.
[26] Interview.
[27] One reason the ASA was not open skies is that it limited the number of U.S. carriers to three; UPS and Polar Air Cargo were later named the other two U.S. cargo carriers. In exchange for liberal cargo rights, the U.S. agreed to a six-year phase-in of passenger open skies in the 1996 – 2002 timeframe.
[28] *Airline Business*, April 1996
[29] Interviews.
[30] U.S. Department of Transportation (http://www.dot.gov).
[31] Interviews. New Zealand also proposed open skies to the Netherlands without success.
[32] Interviews. LTU, a German charter operator, also gained passenger flights to the Philippines.
[33] Interview.
[34] Antonio Jr. E. T. *"Industrial Policies in the Philippines,"* In Masuyama *et al* (1997), pp. 233 – 252.
[35] Under AFTA, ASEAN states would bring tariffs on most goods down to 0 – 0.5% by 2002.
[36] Interviews.
[37] Interviews.
[38] This ASA, known as "BIMP-EAGA," provided access to Philippine cities Davao City, General Santos, Puerto Princesa, and Zamboanga. It excluded fifth, sixth, and seventh freedoms.
[39] Goyer and Tan (2000).

[40] *Ibid.*
[41] Other members included Brunei Darussalam, Chile, Mexico, and Papua New Guinea.
[42] Source: APEC. (http://www.sccp.org)
[43] *Manila Standard*, September 15, 2000. Singapore led a working group to assess these issues.
[44] Interview. At the time, all of these countries had open skies agreements with the U.S. except Australia, which concluded a cargo open skies agreement in February 2000.
[45] Australia did not join the open skies agreement because it disagreed with the chosen definition of "open skies," which was based on the U.S. model. Sticking points included FDI restrictions and competition policy.
[46] APEC Subcommittee on Customs Procedures (1997). See http://www.sccp.org/sccplibrary.
[47] APEC SCCP Meeting Minutes, Victoria, B.C. (Canada), February 1-3, 1997. (http://www.sccp.org).
[48] Interview. The Philippines had among the highest unweighted tariffs in APEC, along with China and Indonesia.
[49] Interviews.
[50] The Annex on air transport services can be found at (http://www.wto.org/english/tratop_e/serv_e/)-gats.htm). The WTO's Council for Trade in Services is to review developments in the air transport sector every five years to consider broadening the focus of GATS.
[51] Interviews.
[52] *Manila Bulletin*, 1 January 2000.
[53] Interviews. India is an example of a country that argues that the Kyoto Accord of the World Customs Organization is a better vehicle for dealing with customs reform, despite the fact it lacks a dispute resolution mechanism. The WTO influenced other customs reforms (e.g., rules of origin and pre-shipment inspection) that were more general in nature and not detailed in this research. In contrast, the Valuation Agreement was tightly linked with the air cargo industry, particularly with the demands of express air cargo service.
[54] According to the WTO, some members have dealt with ambiguities by entering text in their schedules and explaining the scope of the courier service commitment with respect to means of transport. See WTO (1998a), p. 3.
[55] Interview.
[56] World Trade Organization (1998a), p. 6, interviews. "Commercial presence" implies that a service supplier of one member establishes territorial presence in another member's territory to provide a service.
[57] Interview.
[58] Interview.
[59] Taiwan negotiated ASAs through the Taipei Economic and Cultural Representative Office (TECRO) rather than official government channels.
[60] Interviews.
[61] Interview. India later unilaterally declared an open skies cargo policy in 1999.
[62] Interview. An ASA was initialed with Russia after years of negotiations but never implemented.
[63] According to a senior CAA official, Japan regularly reports results of Taiwan ASA talks to China. This may have contributed to Japan's well-documented reluctance to liberalize air cargo rights with Taiwan. Japan was also one of the few Asian states to change the name of its flag carrier serving Taiwan. Japan Airlines flew as "Japan Asia Airlines."
[64] Interviews.
[65] *Cargo News Asia*, June 21, 2000; *International Airport Review*, September 2000.
[66] Interviews.
[67] *Cargo News Asia*, August 9, 1999.
[68] Australian International Air Services Commission, ACN 009-661-901, 16 December 1999. See (http://www.dotrs.gov.au.iasc).
[69] Interviews.
[70] Interviews.
[71] Interviews.
[72] Interviews. FedEx and UPS requested U.S. government support with this matter.
[73] Interview.
[74] Interview.
[75] Interview.
[76] Interviews.

[77] Woods, David, *"Air Cargo Services: A Candidate for Liberalisation in a New Trade Round,"* in WTO and Agenda Publishing (1999), p. 82. In contrast, there are about 40 daily passenger flights between Japan and Taiwan. Much of the air cargo movement between the two countries is in the belly of these aircraft. A good account of the influence of the United States government on Japanese air service rights can be found in Yamauchi, Hirotaka, *"Toward a More Liberal Sky in Japan,"* pp. 195 – 225, in Ito and Krueger (2000).
[78] Interviews, Department of Customs documentation. APEC activities are documented in "Customs Administration of Chinese Taipei," a Ministry of Finance report published in 1999. Taiwan's goal was implementation of Express Clearance Guidelines by 2000.
[79] Interview
[80] *APROC Newsletter*, November 1998; interviews. In 2000, Taiwan began drafting a revision to article 49 of the Civil Aviation Law to increase the limit on foreign ownership to 100% for air cargo infrastructure and freight forwarders.
[81] McBeath (1998), pp. 197-198.
[82] Interview.
[83] Source: APROC Window, CEPD.
[84] Interview.
[85] Indonesia is one example. According to a U.S. Department of Transportation Official, Japan vowed to "never" agree to unfettered open skies, despite agreeing to expand air cargo rights twice in the 1990s.
[86] Interview.
[87] APEC SCCP Meeting Minutes, Victoria, B.C. (Canada), February 1-3, 1997. Data was cited in a working paper prepared by John Raven of the International Express Carriers Conference. (http://www.sccp.org)
[88] Speech by Carl Asmus (FedEx) to International Air Cargo Conference, Atlantic City, New Jersey, 27 May 1999.

Chapter VIII: Conclusions

This research assessed the political economy of air cargo industry in the Philippines and Taiwan during the 1990 – 1999 timeframe. The primary question addressed is *what factors drove government commercial policy decisions in the air cargo sector?* A working hypothesis was proposed that economic globalization and the rise of TNCs are challenging the ability of national governments to independently pursue air cargo commercial policies. A levels-of-analysis empirical approach was utilized that analyzed causal factors emanating from domestic and international sources, including interests, institutions, and ideas.

This chapter consists of three sections. The first section presents a review of this study's main arguments. The next section revisits the commercial policy taxonomy of domestic and international interests, institutions, and ideology threaded throughout this research and synthesizes key findings. For example, how were the domestic factors analyzed in Chapter Four intertwined with the role international of interests and institutions in Chapters Five and Six? The third section will assess the implications of empirical findings for IPE theory, including future directions for research.

Following this chapter are a postscript detailing developments in The Philippines and Taiwan after the period of study and an appendix outlining implications for policy-makers and business executives.

Review Of The Argument

Chapter Two outlined the history, structure and regulation of the air cargo industry. Air cargo emerged from World War two as mostly a supplementary source of revenue for passenger carriers that became more significant with the widespread introduction of jet aircraft in the 1960's and 1970's. Most service was airport to airport, relying on freight forwarders and other suppliers handling cargo movements to and from airports. The 1980's and 1990's brought a new class of suppliers known as "integrators" that provided door-to-door service and global 24-48 hour delivery. The premium class of service they provided, known as "express," was increasingly differentiated from non-integrated "freight" service (provided primarily by airlines) and grew substantially in the 1990s as global just-in-time supply chains proliferated. Four TNCs – FedEx, UPS, DHL, and TNT – developed extensive global networks and controlled more than 90% of express shipments. While express service enjoyed rapid growth, freight service remained the largest segment of the air cargo market. Air cargo, once a niche business, became a vital element of global commerce that carried more than one-third of international trade by the end of the 1990s.

Chapter Three identified air cargo commercial policies in the Philippines and Taiwan in the broader context of macroeconomic and political circumstances. The Philippines emerged from an era of domination by a state owned flag carrier to embrace a liberal air cargo policy framework under President Ramos from 1992 – 1998. Three of the "big four" integrators (FedEx, TNT, and DHL) established their Asian hubs in the Philippines, new international airports were developed, and 17 cargo air service agreements (ASAs) were signed to significantly expand international cargo rights. The trend towards liberalization was reversed under the Estrada Administration in 1998 as the government adopted a protectionist policy framework to support Philippine Airlines. DHL and TNT moved their air cargo hubs to other countries and some ASAs were renegotiated to reduce access to the Philippine market.

Like the Philippines, Taiwan sought to leverage its position in the center of East Asia to become a regional air cargo hub. This goal was explicitly identified in the Asia Pacific Regional Operations Center (APROC) initiative, announced in 1995. Significant policy initiatives included comprehensive customs reform, reduced foreign direct investment (FDI) restrictions, and air cargo infrastructure development. APROC received a much-needed boost when UPS established its Asian hub in Taiwan in 1996 after government negotiations with FedEx failed. A cargo open skies policy framework was declared in 1995 and more than 20 air service agreements were signed liberalizing air cargo rights. Government prohibitions on direct flights to China and South Korea, however, remained in place. A new carrier (EVA Air) began service in 1991 and by the end of the decade achieved roughly the same business volume as flag carrier China Airlines. The government influenced this outcome by awarding ASAs in an even-handed fashion to both carriers.

Chapter Four examined the economic impact of cargo commercial policies in both countries. The general trends outlined in Chapter Two were found to be highly applicable to the Philippines and Taiwan. TNC investment in the Philippines fueled rapid growth of trade in electronic goods, which accounted for more than 60% of exports by the end of the decade. Demand for cargo services, in turn, nearly tripled in the 1990s until an Asian recession and protection of Philippine Airlines reversed the trend in 1998. Air cargo surpassed maritime to become the most significant mode of trade transportation, carrying two-thirds of exports and one-half of imports by value. The impact of air cargo service on FDI and employment was also significant. Subic Bay, the location of the FedEx hub, attracted more than 150 firms and $2 billion in FDI, including many high technology TNCs. The story was much the same in Taiwan, where a surge in high technology exports led to a doubling of air cargo demand in the study period. By 1999, air cargo carried approximately 40% of trade compared to less than 20% in 1990. The air cargo sector alone recorded an estimated increase of 70,000 jobs and FDI in excess of $1 billion. The benefits to the broader economy were also significant given the high percentage of inward FDI in sectors dependent on air cargo services. Despite the benefits of air cargo service in both Taiwan and the Philippines, commercial policies that restricted the development of air cargo industry were observed in both states.

Chapter Five explored the role of domestic interests, domestic institutions, and ideas on air cargo policy outcomes. In both countries, air carriers were the most active domestic interests and had significant influence on air service agreements. However, a single individual (Philippine Airlines owner Lucio Tan) was able to sway many aspects of Philippine commercial policy in the late 1990s under the Estrada Administration.

Domestic institutions were another area of significant contrast between Taiwan and the Philippines. In Taiwan, the lead economic planning organization (the Council for Economic Planning and Development) was actively involved in air cargo policy planning and coordinated policy implementation closely with other government organizations while the equivalent Philippine organization (the National Economic and Development Authority) had minimal involvement with numerous ministries pursuing uncoordinated, independent agendas. Domestic institutions also made the Philippines more vulnerable to rent seeking influence, as evidenced by the events that led to a domestic monopoly under the control of Mr. Tan. It was also noted that the transparency of governance and agility provided by the Subic Bay Special Economic Zone, in contrast to traditional domestic institutions, were instrumental in attracting FedEx to the country. A final institutional contrast was Taiwan's use of intermediary organizations between government and business interests to negotiate international air service agreements, while direct contact between individuals and firms with government officials (including the President) was the norm in the Philippines. Overall, Taiwanese government organizations were better insulated from domestic interests and had fewer, more focused connections with the air cargo suppliers than their Philippine counterparts. While Philippine civil society was generally more active than in Taiwan, its focus tended to be on the *demand* side of the air cargo market. Indeed, there was no Taiwanese equivalent of The Freedom To Fly Coalition in the aviation sector.

The realm of ideas exerted varying levels of influence in each country. In Taiwan, liberal economic beliefs espoused by key decision-makers contributed to the APROC initiative and a liberal air cargo policy framework. The Philippines, in contrast, lacked a consistent ideas-based framework as three presidential administrations pursued very different visions of the national economic interest. This contributed to erratic air cargo policy shifts that ranged from aggressive liberalization to protection.

Chapter Six probed the influence of transnational interests on commercial policy outcomes, including transnational corporations and industry associations. Of this group, integrators – particularly FedEx and UPS -- had the most influence on air cargo commercial policies in both states. The influence of other transnational interests, including non-integrated carriers, freight forwarders, and chambers of commerce, was less pronounced. FedEx and UPS were protagonists, with U.S. government support, for liberal air service agreements with both countries that included provisions for "hubbing" and "beyond rights" to other markets. Integrators were also key catalysts for customs reform, utilizing a two-track approach that included direct bilateral lobbying of government officials and influencing the standards adopted by intergovernmental organizations. Domestic institutions and structures attenuated the influence of transnational interests. Taiwan's strong and cohesive institutions spurned FedEx's aggressive bid to make Taipei its primary Asian hub in the mid-1990s; UPS, in contrast, utilized a negotiating style in tune with Taiwan's institutions and successfully bargained to establish a Taipei hub. In contrast, less cohesive Philippine institutions facilitated easier access to decision-makers. FedEx and UPS utilized sophisticated government affairs functions to lobby for their interests with domestic and foreign governments, intergovernmental organizations, and transnational industry associations.

Chapter Seven analyzed the influence of state-state bargaining and international organizations on air cargo policy decisions. International air service agreements were found to be the issue-area most affected by state-state bargaining, and variations in state political power appeared to influence bargaining outcomes. The United States aggressively supported the interests of FedEx and UPS in establishing in-country hubs, and also helped to secure concessions in ground handling at Taipei's CKS International Airport. At the same time, the U.S. government pursued an Asian "open skies" policy that resulted in significant air cargo liberalization with states throughout East Asia. These agreements contributed to the breadth and density of networks developed by FedEx and UPS. While the U.S. aggressively pursued its policy agenda, other states with important economic ties but less political influence enjoyed less success in shaping commercial policy in Taiwan and the Philippines, including Japan and open skies advocate Singapore. It was also notable that European integrators DHL and TNT did not enjoy the same level of support from their home governments as their U.S. competitors.

While state-state bargaining influenced air service agreements, international organizations played an influential and growing role in customs reforms and FDI policies in both states. Intergovernmental organizations such as the World Customs Organization (WCO) and World Trade Organization (WTO) developed common customs standards and procedures, and often joined forces with air cargo integrators to educate national government officials and secure acceptance and implementation of reforms. Regional intergovernmental organizations, including the Asia-Pacific Economic Cooperation (APEC) and the Association of Southeast Asian Nations (ASEAN), reinforced customs reform initiatives. WTO accession negotiations (in Taiwan) and Uruguay Round commitments (in the Philippines) were also a catalyst for lifting FDI restrictions in freight forwarding, ground handling, and infrastructure. FDI limitations on air carriers remained unchanged in both countries, despite overtures from other Asian air carriers. Although Taiwan's status as a *de facto state* limited its scope of participation in international organizations, its desire for international political legitimacy and WTO accession contributed to the stronger influence of these organizations on air cargo policy reforms than in the Philippines.

Synthesizing The Results: The Interactions Of Interests, Institutions, And Ideas

Thus far, the influences of interests, institutions, and ideas on commercial policies have been analyzed at the domestic and international levels, largely in isolation from one another. Each has played a role in some policy outcomes. But what were the crucial interrelationships between each and which factors had the most influence on particular issue-areas? In synthesizing the results from this research, some empirical generalizations will be outlined by returning to the trade, foreign direct investment, and industry policy categories used throughout the study.

Trade Policy

The results from this research indicate that international politics and state-state bargaining strongly influenced the "possibility set" of air service rights available to air cargo interests. This proposition is well illustrated by the success of the U.S. in pursuing its open skies agenda throughout East Asia, despite the significant differences in the domestic interests and institutions in each of these states. In Taiwan and the Philippines, the U.S. enjoyed the most liberal air cargo rights of any country. While the U.S. government's negotiating position in both states was aided by the establishment of major hubs by FedEx and UPS, it also concluded cargo open skies agreements with other Asian countries where this was not the case, including Malaysia, Korea, New Zealand, and Brunei. The U.S. also completed agreements liberalizing air service rights with China and Japan, two of the more protectionist countries in the region. David Woods (1999) has noted that with regard to ASAs, Japan "tends to budge only in response to U.S. bilateral pressure."[1] Overall, there is strong evidence to suggest that the U.S. leveraged its considerable economic and political clout in the issue-area of air service agreements.

Domestic factors also played an important role in air cargo policy outcomes, as government negotiators were under pressure to conclude ASAs that were favorable to domestic air carriers. In most cases they did, but not when it involved powerful states like the U.S. Even the Philippines' move to protectionism in the late 1990s did not affect the U.S. air service agreement – despite the fact that American carriers flew far more international flights to the Philippines than any other state including Taiwan. If the Philippine government *really* wanted to protect Philippine Airlines, it would have restricted flights to the U.S., not Taiwan. A Philippines government official summed up the situation when he stated, "We can push around Taiwan, but not the U.S."[2] International politics also trumped the desires of Taiwan's domestic interests in many instances. This is demonstrated by the absence of air service rights to China and South Korea despite the potentially significant commercial benefits of these air links to China Airlines and EVA Air.

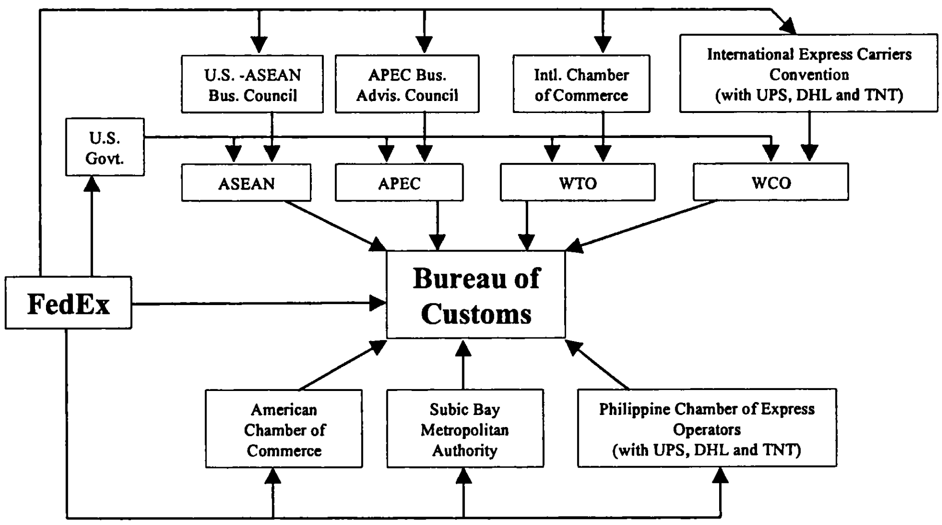
What about TNCs? FedEx and UPS clearly devoted considerable resources to influencing commercial policy and were arguably the most influential air cargo TNCs in the Philippines and Taiwan in the 1990s. However, the other two major integrators, TNT and DHL, exerted far less influence. The national origin of TNCs made a crucial difference. The proposition here is that FedEx and UPS did exert influence on air service agreements in both states, but were aided considerably by the U.S. government. Indeed, the U.S. government's open skies policy – by its own admission -- advanced the interests of FedEx and UPS.[3] In some instances, U.S. transnational actors such as the American Chamber of Commerce also assisted FedEx and UPS in pursuing commercial policy objectives. One can argue that if the nationalities of integrators were reversed – i.e., if FedEx were a Belgian firm and DHL and American firm -- the air service rights enjoyed by each of these firms would be substantively different.

In contrast, state-state bargaining and domestic interests had less relative influence on customs policies. As noted in Chapter Seven, air cargo customs was an issue-area that was heavily institutionalized by international organizations including the WCO, WTO, APEC, and ASEAN. These organizations were important conduits for sharing information and developing policy frameworks for customs reform. In some cases, international organizations were important instigators of reform. A good example is the early adoption of WTO Customs Valuation framework in Taiwan to strengthen its case for WTO accession. Domestic institutions were also an important factor in explaining the success of customs reform. In Taiwan, interministerial coordination between the Bureau of Customs and the Council for Economic Planning and Development (CEPD) helped to facilitate Taiwan's successful customs reform efforts. There was neither significant accountability nor coordination in the Philippines, which struggled to reform customs over the study timeframe. The Philippines was also harmed by rampant corruption, which had long plagued the Bureau of Customs.

The most influential actors concerning customs reform were not domestic interests, but air cargo TNCs. The fingerprints of the "big four" integrators could be found on the most far-reaching reforms in both states, particularly where establishment of an air cargo hub was involved. At the same time, integrators recognized the benefits of influencing customs standards established by international organizations. Bilateral lobbying of individual states for customs reform is a time-consuming process, and the "big four" increased coordination with the WTO, WCO, APEC, and ASEAN in their struggle to reform national customs procedures throughout Asia. They joined forces to work with the WCO to establish express customs standards (crucial for the provision of integrated air cargo service) and were supporters of the WTO Valuation Agreement that Taiwan and the Philippines eventually implemented. While influencing standards *from above* through international organizations, air cargo integrators also communicated their interests *from below* by direct lobbying of customs or aligning with domestic interests. Figure 8.1 illustrates the phenomenon, documenting the FedEx influence channels to the Philippine Bureau of Customs that are identified in this research.

A conclusion emerging from this research is that air cargo integrators and international organizations play a growing role in customs policy reform, while domestic institutions influence the probability of successful policy implementation. Unlike air service agreements, customs reform was an issue-area largely devoid of the influence of state-state bargaining.

Figure 8.1: FedEx Influence Channels On Customs Policies In The Philippines



Sources: Interviews, Analysis

Foreign Direct Investment Policy

A mixture of international and domestic factors influenced FDI policies in the two study subjects. International institutions played a particularly important role, as FDI became part of the General Agreement on Trade in Services framework (mode 3 --"commercial presence") in the 1990s.[4] The Philippines lifted FDI restrictions on freight forwarding, ground handling, and cargo terminal services at part of its Uruguay Round commitments (except ownership of land and customs brokerage), and Taiwan's bilateral WTO negotiations with Switzerland were a catalyst for increasing allowable foreign ownership to 50% in the same categories. In both states, the impetus to reform FDI policies "from above" via international institutions was aided considerably by domestic reform initiatives "from below" (e.g. Ramos' liberalization drive and Taiwan's Asia Pacific Regional Operations Center initiative).

Air cargo TNCs played a role in a few notable FDI policies. In the Philippines, FedEx bargained successfully to receive near-exclusive use of the outstanding Subic Bay airport infrastructure. In Taiwan, UPS and FedEx teamed with the U.S. government to win the right to operate their own airport distribution facilities.

Notably, FDI limits for air carriers were not changed in either country despite overtures from other Asian carriers to purchase equity in China Airlines and Philippine Airlines. Here, influence of domestic interests and the realm of ideas (i.e., the belief that controlling ownership of air carrier was in the national interest) appeared to shape the decisions to leave these FDI limitations unchanged.[5]

Industry Policy

Domestic factors generally had the most influence on policies concerning infrastructure, competition policy, regulation, and taxation in both states. Government decision-makers and their advisors were the architects of the most significant industry policies while the nature of domestic institutions determined their ability implement these plans. Where institutions were weak or fragmented (as in the Philippines), domestic interests held more sway.

The Asia Pacific Regional Operations Center initiative, developed and sponsored by the Council for Economic Planning and Development (CEPD), defined key elements of the air cargo industry policy framework in Taiwan. China Airlines and EVA Air, two key domestic air cargo interests, were not formally consulted until after the plan was in motion. Similarly, President Ramos and his key advisors drove air transportation liberalization culminating in

Executive Order 219 based on a perspective that efficient air service was more important than protecting Philippine Airlines. Ramos also altered domestic institutions by supporting special economic zones – culminating in economic development at Subic Bay that captured worldwide attention. Confidence was high that Philippine institutions had matured and the path towards liberalization would continue after the end of Ramos Administration. In 1996, then national security advisor General Jose Almonte stated, "Progress will march on, even if a chimpanzee becomes president."[6] Within one year of President Estrada's 1998 inauguration, air cargo policy completed a U-turn that embraced protectionism of Philippine Airlines, drove integrators DHL and TNT out of the country, and severed direct air flights with Taiwan – the country's third largest trading partner and an important source of FDI. The economic damage wrought by these policies was severe. In retrospect, General Almonte's prediction was optimistic. Philippine institutions, at least in the1990s, were *not* up to the challenge of cronyism and the rent-seeking influence of domestic interests.

In some cases, the momentum for policy reform was reinforced by events, or crises. APROC was partially a reaction to Taiwan's burgeoning trade surplus and a decline in foreign investment. In the Philippines, a domestic political crisis in Mindanao contributed to government support of the Davao International Airport Project as well as an open skies agreement between the southern Philippines, Indonesia, Brunei, and Malaysia. In addition, the economic damage wrought by the temporary shutdown of Philippine Airlines in 1998 most likely contributed to President Estrada's policy shift to protectionism.

In contrast to the other two categories of commercial policy – trade and FDI – international interests and institutions generally had a minor influence on most industry policy decisions in the Philippines and Taiwan.

Theoretical Implications Of Research

What can a study of a single industry in two countries contribute to IPE theory? With such a narrow scope of inquiry, empirical generalizations must be qualified. The departure point for this research was the hypothesis that economic globalization and the rise of TNCs is challenging the ability of national governments to pursue independent air cargo commercial policies – despite its status as one of the most heavily regulated industries in the global economy. The evidence concerning this hypothesis is mixed. In some issue-areas (e.g., customs procedures, FDI in air cargo infrastructure, and air service agreements) the hypothesis appears to be valid, while in other issue-areas (e.g., FDI in air carriers and competition policy) the hypothesis does not appear to hold. Three more general propositions going beyond the two case studies are delineated below.

Proposition #1: Actors' preferences determine the of feasible ASA outcomes; domestic institutions determine where in that range policy will actually be.

The first proposition relates to the aviation issue-area that has arguably received the most attention to date by IPE and IR scholars: international air service agreements. This research provides strong evidence that actor's preferences at both the international and domestic levels influenced the range of feasible international air service agreement (ASA) outcomes. For many ASAs, international politics and state-state bargaining were decisive is shaping outcomes. Indeed, it is argued that ASAs were the air cargo issue-area most influenced by state-state bargaining. This finding aligns with previous IPE research on the aviation sector by Sochor (1991), Nayar (1995), and Trethaway (1997) that emphasizes the primacy of national interests in determining ASA bargaining outcomes.[7] However, international politics alone cannot explain all the ASA outcomes in this research. Transnational interests (e.g., FedEx and UPS) and domestic interests (e.g., Mr. Tan, PAL, PEAC, CAL, and EVA) also played an important role in some agreements. Thus examining the interplay between governments, transnational interests, and domestic interests provides a more robust context to evaluate ASA outcomes than focusing on international politics alone. In some instances, TNC bargained with governments as independent actors.[8] In other instances, ASA policies were highly influenced by bargaining between domestic interests and national authorities.

While it is useful to broaden the empirical viewfinder to include non-state actors, in which instances do these actors exert the most influence on ASA outcomes? Here, domestic institutions play an important role by channeling interest group input and constraining the decision-making independence of government officials. In Taiwan, an intermediate organization (Taipei Airline Association) put emphasis on government-industry consensus, while Philippine institutions were subject to rent-seeking influence and highly dependent on the individual preferences of the president. Thus, there were only a few instances in Taiwan where government negotiators took a position contrary to key domestic cargo interests, while this was not the case in the Philippines.

Given these findings, the contention by Milner (1997) that air service agreements are a function of both international politics and domestic factors fits best with the empirical evidence in this research.[9] While acknowledging the importance of state-state bargaining, Milner contends that three domestic factors condition policy outcomes: 1) the structure of domestic preferences, 2) the nature of domestic institutions, and 3) the distribution of information among government organizations and officials. Synthesizing these empirical generalizations, Milner asserts that *actors' preferences determine the range within which feasible outcomes are possible; the institutions determine where in that range policy will actually be.*[10]

While this theoretical proposition does the most effective job of explaining ASA outcomes by combining the influence of international (e.g., state) interests, domestic interests, and domestic institutions, it could be improved by explicitly addressing the potential influence of transnational actors, e.g., the circumstances when air cargo TNCs *as independent actors* have the most influence. This critique is addressed by the second empirical proposition of this research.

Proposition #2: The ability of air cargo TNCs to affect commercial policies is influenced by the nature of domestic institutions and the degree of international institutionalization.

A second theoretical proposition concerns the conditions under which air cargo TNCs exert the most influence on policy outcomes. The results of this research are a strong endorsement of the contention of some IPE scholars, particularly Risse-Kappen (1995), that have linked the influence of transnational actors for a particular issue-area with domestic structures/institutions and the degree of international institutionalization.[11]

Risse-Kappen's first hypothesis is that domestic structures influence the ability of transnational actors to influence policy outcomes. Domestic structures have three important distinctions: 1) the structure of political institutions (centralized or fragmented), 2) the structure of demand formation in civil society (strong or weak), and 3) the institutions of policy networks linking state and society (consensual or polarized). Risse-Kappen contends that domestic structures with highly centralized political institutions with few intermediate organizations and weak societal organization, which he labels "state-controlled," are the most difficult for transnational interests to penetrate (figure 8.2). A second type of domestic structure, "state-dominated," has greater prevalence over intermediate organizations and is also difficult for transnational actors to penetrate. However, once transnational actors overcome the initial hurdle of gaining access to "state-controlled" or "state-dominated" structures, their policy impact may be profound – especially if powerful state actors are pre-disposed toward their goals. At the other end of the spectrum are domestic structures with fragmented political institutions ("society-dominated" and "fragmented") that are the most permeable to TNC influence. Risse-Kappen argues that while "society-dominated" structures are relatively easy to penetrate, transnational actors must often build coalitions with powerful societal organizations to successful influence policy outcomes.[12]

Figure 8.2: Types Of Domestic Structures
Adapted from Risse-Kappen (1995)

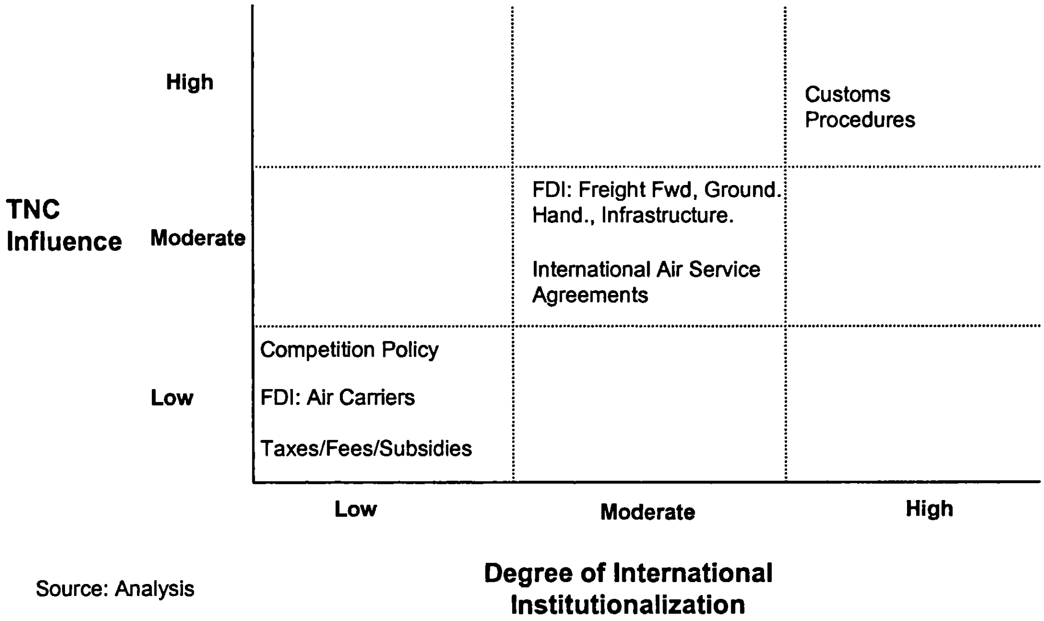
		Structure Of Demand Formation In Civil Society			
		Strong		Weak	
		Policy Networks		***Policy Networks***	
		Consensual	Polarized	Consensual	Polarized
Political Institutions	Centralized	*Corporatist*	*Stalemate*	*State-dominated* Taiwan	*State-controlled*
	Fragmented	*Society-dominated* The Philippines		*Fragile*	

Source: Risse Kappen (1995), p. 23
Note: Placement of Taiwan in state-dominated category based on analysis

Based on the results of this research, Taiwan – with its centralized political institutions, consensual policy networks, and less politicized civil society -- is closest to a "state-dominated" domestic structure. In contrast, the Philippines is closest to "society-dominated" based on its fragmented political institutions and highly political civil society.[13] This theoretical framework aligns with the evidence of TNC influence presented in Chapter Six. Air cargo TNCs in "state-dominated" Taiwan did indeed face a difficult task in gaining access to decision-makers as evidenced by FedEx's failure to win concessions for a Taipei hub. Once this barrier was overcome, as in the case of UPS, an alliance with a powerful state actor (e.g., the CEPD) that was pre-disposed toward its goals resulted in significant policy influence. In "society-dominated" Philippines, FedEx did enjoy easier access to decision-makers but secured its desired policy outcomes after building an alliance with Richard Gordon of the Subic Bay Metropolitan Authority.

Risse-Kappen's second argument, that the degree of international institutionalization of an issue-area is positively correlated with TNC influence, also appears to fit well with the empirical evidence in this research. Air cargo integrators appeared to have the most influence on customs policies, the most institutionalized issue-area of air cargo commercial policy. As the FedEx –Philippine Bureau of Customs example in figure 8.1 highlighted, the involvement of international organizations create new influence channels on national policy *from above*, on national policy decisions. In contrast, TNCs had less relative influence policies with less international institutionalization in Taiwan and the Philippines, such as competition policy, air carrier FDI, and taxes/subsidies. In between these two extremes are FDI limits for freight forwarding/ground handling/infrastructure and air service agreements, issue-areas where TNCs had moderate influence. While it is problematic to quantify with precision, there does indeed appear to be a positive correlation between TNC influence and the degree of international institutionalization. This is depicted in figure 8.3.

Figure 8.3: TNC Influence Vs. Issue-Area Institutionalization
The Air Cargo Industry In The Philippines And Taiwan



Source: Analysis

Not all TNCs have significant bargaining leverage with national governments. Indeed, of the many transnational interests with a stake in air cargo policy outcomes, only two TNCs -- UPS and FedEx – appeared to have significant bargaining leverage with the Philippines and Taiwan. Clearly, part of this influence was a result of their intent to establish regional air cargo hubs. However, these firms also enjoyed greater bargaining power as a result of the high entry barriers and significant degree of concentration in the "express" segment of air cargo. With four integrators controlling 90% of shipments and operating in more than 200 states, their bargaining power was impressive – particularly compared to the fragmented group of suppliers to the "freight" segment. Despite the impressive reputation enjoyed by combination carriers such as Singapore Airlines, the freight service that they provided was increasingly regarded as a commodity with low entry barriers. As Stopford and Strange (1993) noted, in markets where entry barriers are low, TNCs can lose bargaining leverage.

Many national authorities recognized the difference between freight and express air cargo service, and were more willing to defer to integrators in bargaining situations.

A final point relevant to Risse-Kappen's hypothesis is that *the degree of TNC influence depends on the issue-area*. In this case, it appears that the degree of international institutionalization influences the ability of TNCs to affect air cargo policies. It is therefore problematic to generalize about TNC influence for an entire industry or sector – let alone the global economy. Based on the results of this research, Krasner (1995) captured the appropriate balance of bargaining leverage between states and TNCs when he noted that:

> Transnationals may frustrate or promote the objectives of state actors. In conflicts between the state (central decision making organizations) and multinationals, state actors have formidable resources. They win, but not always.[14]

Proposition #3: Empirical approaches that combine international and domestic levels of analysis add to understanding of sectoral commercial policy development

The final proposition emanating from this dissertation is to highlight the utility of synthesizing the domestic and international levels of analysis for research in international political economy. The empirical framework of this research was in the spirit of social scientists such as Putnam (1988), Evans (1993), Moravscik (1993), and Keohane and Milner (1996) that have attempted to bridge the gap between comparative politics and IPE.[15]

Consider the following: what explanatory factors would have been left out if this body of research focused only on states and international institutions (Chapter Seven) as causal factors and excluded analyses of domestic factors and transnational interests (Chapters Five and Six)? Arguably, significant explanatory information would have been omitted. In seeking to understand the reasons that Taiwan undertook a significant overhaul of its customs operations in the 1990s, for example, a political realist might have sought to explain outcomes in terms state-state bargaining and security concerns, rather than finding that international institutions and air cargo TNCs were important catalysts for reform. Clearly, customs policies are not on par with the high politics of interstate conflict, but they do influence government revenue and have a significant influence on border security – issues that states in an anarchical international system *should* be concerned about. Another example: In seeking to understand the causes of the Philippine – Taiwan "air war" in 1999, for example, a social scientist might have selected international politics as explanatory variable, rather than discovering that a powerful and well-connected individual leveraging relatively weak domestic institutions was an important catalyst for this action.

Similarly, it is worth considering the explanatory factors that might have been omitted if this research had focused only explaining policy outcomes in terms of domestic factors (Chapter Five) in the comparative political economy tradition. In seeking to explain why the U.S. obtained the most liberal air service agreement with both The Philippines and Taiwan, for example, a comparative political scientist might have focused on domestic structures as the explanatory variable while ignoring significant U.S. political, military, and economic power in East Asia. As the analysis in Chapter Seven demonstrated, the U.S. negotiated agreements resulting in significant cargo rights liberalization with 13 states in East Asia, Australia, and New Zealand with vastly different domestic structures, including nine "open skies" ASAs.

The proposition that social scientists should use empirical approaches combining domestic and international politics does not make the task of commercial policy analysis any easier. Indeed, it adds complexity to what is already a difficult task. The payoff is a much broader scope of understanding for policy outcomes.

Future Directions For Research

This study of the air cargo industry has highlighted is the complexity surrounding attempts by national authorities to regulate a service industry in the global economy. By definition, the provision of services does not stop at the border -- like merchandise trade – but requires rules and institutions for issue-areas that were once considered domestic only. This presents formidable obstacles to international trade in services, which are worth less than 25% of merchandise trade but represent roughly the same share of global economic output.[16]

Future research that highlights the interactions between the forces of globalization and domestic factors in other highly regulated service industries could therefore be very useful not only for IPE theory, but also government decision-makers, IGO bureaucrats, NGOs, and business executives that are "in the arena" shaping the policies that affect the well-being of constituents and the efficiency of markets. The IPE body of research on service industries is relatively immature and there are still many voids of knowledge, particularly concerning the role of domestic factors and transnational actors in policy outcomes. This type of research requires scholars that are equally comfortable in the realms of international politics and international business. Facts are often difficult to pinpoint and do not easily fit with many conventional IPE theories. However, it is argued here that this type of inductive analysis ultimately provides the greatest value for the study of international political economy.

In particular, further research of the air cargo industry that builds on methodology and findings of this project would enhance general understanding of the heavily regulated aviation sector. For too long, the social science spotlight has shined primarily on passenger services. Air cargo has come of age as a vital tool of international commerce and catalyst of trade and FDI. If current trends continue, air cargo will in the next decade surpass maritime transportation as the dominant mode of transportation for international merchandise trade. Airports and air cargo infrastructure are becoming magnets for economic activity, particularly in high technology industries. Moreover, air cargo integrators are among the most global TNCs in the world economy and are emerging as important transnational actors that determine what, how, and when goods move between states in the international system.

Further air cargo research as a means of expanding the body of knowledge of the international aviation sector is a worthy endeavor, for its value to global community extends far beyond its notable economic contributions. As Lowenfeld (1975) wrote more than 25 years ago:

> International aviation is not just another problem in a changing economic system, though it is that; international civil aviation is a serious problem in international relations, affecting the way governments view one another, the way citizens view their own countries, and in a variety of direct and indirect connections the security arrangements by which we live.[17]

POSTSCRIPT: RECENT DEVEOPMENTS

One of the difficulties in conducting social-scientific research is the need to limit the scope of inquiry. The timeframe for this research ended in 1999, 18 months into the term of Philippine President Joseph Ejercito Estrada. At the close of the study period, Estrada was under attack for unleashing an "air war" with Taiwan to protect his friend Lucio Tan, owner of Philippine Airlines. This was the first significant event that raised the concern widespread corruption in the Estrada Administration. The cost of this incident to the national economy was steep, with a 72% drop in Taiwanese FDI and the loss of 20,000 Filipino jobs in Taiwan, worth $300 million in lost wages.[18] The Freedom to Fly Coalition, a domestic NGO that formed in late 1999 to represent aviation consumers, gained stature and influence as it publicized the cost of restrictive aviation policies.

In January 2000, the chairman of the Philippine Securities and Exchange Commission charged President Estrada with pressuring him to clear a friend accused in the country's worst insider trading scandal. In September, the "air war" with Taiwan ended, returning allowable air transportation capacity to the provisions of the original 1996 ASA. In the following month, Estrada was accused of accepting bribes from illegal gambling and Vice President Gloria Macapagal-Arroyo joined the call for Estrada to resign. The House of Representatives impeached the President in November 2000, but a Senate trial in January 2001 ended inconclusively despite accusations that Estrada illegally amassed $63.5 million in bribes and kickbacks. This led to a series of massive protests in Manila dubbed "People Power II" and on January 20, 2001, Estrada resigned as President. The Supreme Court named Vice President Arroyo as the Philippine President.[19] Shortly thereafter, former President

Estrada was jailed. He continued to maintain his innocence and status as the legitimate President.

Richard Gordon, the former Subic Bay Metropolitan Authority Administrator who was fired by President Estrada, was named the new Secretary of Tourism. Philippine air transport policy changed immediately. Within the first 100 days of the Arroyo Administration, an "open skies" framework was announced, Clark International Airport was proclaimed as a major gateway for international and domestic flights, and reform-minded members were appointed to the Civil Aeronautics Board.[20] In addition, UPS signed a letter of intent to establish an intra-Asia hub at a yet-to-be determined location in the country. The company cited the new government's open skies policy as a key reason for selecting the Philippines for its new hub.[21] Thus Philippine air cargo commercial policy had come full circle from the Ramos Administration years to once again embrace liberalization.

There were also monumental political changes in Taiwan. The Democratic Progressive Party ended more than 50 years of KMT domination when Chen Shui-bian was elected President in 2000 elections. The new president's first year in office was rocky, as he faced criticism from China for failing to accept the "One China" principle embraced by the former KMT government. At home, President Chen faced a divided government and an economic slowdown. By mid-2001, the terms for China's accession into the WTO appeared to be finalized and all indications were that China would enter the WTO late 2001. The expectation was that Taiwan would accede to the WTO immediately after China.

The new administration did not appreciably change Taiwan's air cargo commercial policy framework and continued to support the APROC initiative. In response to a request by President Chen, the CEPD announced in late 2000 a project to develop a logistics center in southern Taiwan by integrating the massive Kaohsiung container port with nearby Shaokang International Airport.[22] In the same year, the Ministry of Transportation and Communications issued a report indicating that Taiwan would not achieve APROC objectives unless the ban on direct flights to China was lifted and expansion projects at Taipei's CKS airport were accelerated.[23] There was more bad news: a deal that would have allowed China Airlines to buy 25% of China Cargo Airlines, the mainland's only all-cargo carrier, was sidetracked for apparently political reasons.[24] Meanwhile, CAL, EVA, and UPS experienced robust growth in air cargo business volume into early 2001. In contrast to the Philippines, the political changes in Taiwan resulted in air cargo policy continuity with the prior administration.

Appendix

Implications For Policy-Makers And Business Executives

What area the implications of this research for those "in the arena" of air cargo operations and policy formulation? While the observations gleaned from an examination of two Asian States over a 10-year period are by no means comprehensive, there are some qualified propositions that can be advanced from this research.

What are the opportunities and challenges facing government officials responsible for air cargo policy development?

A key challenge facing policy makers in the 2000s is to gain a deep understanding of the impact of air cargo service on the macro-economy to inform air cargo policy decisions. The growth of high technology trade and global supply chains in the 1990s resulted in a much greater dependence on efficient air cargo service than ever before. While trade drives demand for air cargo services, there is also a growing body of research illustrating that states with efficient air cargo service are more likely to develop high technology trade.[25] In other words, *air cargo services create trade*. It is also widely understood the efficient air cargo services attract FDI. The Taiwanese government identified these relationships and communicated them throughout government and to the public through the Asia Pacific Regional Operations Center initiative. This did not happen to the same extent in the Philippines, which resulted in air cargo policies that protected a domestic interest (PAL) with less than 10,000 employees but damaged an entire industry (electronics) that generated two-thirds of national exports. One factor that often complicates the task is that far too many governments (including those in developed economies) treat cargo and passenger services as a single industry. However, evidence suggests that the two are in fact very different industries that require independent approaches to commercial policy. Another issue is the lack or understanding of air cargo service throughout the broader economy. Here, Australia may offer an interesting model worth benchmarking by policy makers in other states by establishing an organization dedicated to analyzing the impact of microeconomic reforms on the macroeconomy. Australia's Productivity Commission completed a comprehensive assessment of the impact of air cargo service on the national economy in 1998. Among the commission's recommendations were adopting a liberal open skies policy framework and liberalizing FDI requirements for air carriers and airports. National authorities implemented most of the recommendations.

A second implication for government officials is to distinguish between freight and express service in crafting air cargo commercial policy – particularly when making decisions regarding FDI and air service rights. An airport that becomes a hub for an air cargo integrator may often stimulate, rather than depress, demand for freight service provided by domestic carriers. Taiwanese government officials understood this distinction and were therefore confident they could attract UPS to the country *and* develop two world-class air cargo firms providing freight service at the same time. As figure 4.6 amply demonstrated, they were right – the cargo business for CAL and EVA grew dramatically even as UPS and FedEx increased the number for flights to Taiwan. While Taiwan did exhibit strong economic and trade growth throughout the study period, the assertion here is that *allowing air cargo integrators increased access to a national market may assist, rather than hinder, development of domestic air carriers.*

A third implication of this study for policy makers is to carefully select institutions and organizations consistent with desired policy outcomes. States dominated by air service from a single carrier seeking to introduce competition might benefit from an intermediate organization between the government and airlines similar to the Taipei Airline Association discussed in Chapter Four. This approach facilitated an even-handed distribution of international air service rights to CAL and EVA, which contributed to the development of two internationally competitive air cargo carriers despite CAL's strong linkage with the national government. Taiwan also demonstrated another key point relative to domestic institutions: states desiring broad, far-reaching cargo reform might consider appointment of a lead agency similar to the CEPD to coordinate necessary reforms between the numerous government organizations that influence air cargo service.

It is also clear that government officials need to pay attention to customs policies as an important trade and FDI facilitator. The changes in global supply chains for many industries mean that efficient and transparent customs organizations will be an increasingly important source of differentiation for attracting FDI by air cargo and non-air cargo firms alike. For developing economies, the transition to modern customs practices can be especially challenging given their dependence on tariffs for government funding, the investment requirements for modern customs facilities/systems, and the corruption that often riddles customs departments. In some cases, this means drastic action might be required for pursuing serious reform. One of Mexican President Vincente Fox's first actions after taking office in 2001 was to oversee the firing of 45 of 47 customs supervisors -- an action that signaled he was serious about reforming Mexico's notoriously corrupt Customs Agency and facilitating transparency in government institutions.[26] The key point here is: *as global supply chains* *become more tightly integrated, states must compete on the basis of efficient and transparent customs operations to attract FDI.*

A final implication for government officials is to underscore the linkage between domestic institutions and air cargo development. In other words, promoting a policy framework of macroeconomic stability and competition based on clear, predictable, and non-discriminatory rules is good for air cargo (as well as other sectors).

What does the evidence in this research tell us about the prospects for liberalization of trade in air cargo services?

The evidence of this research indicates mixed prospects for air cargo liberalization at the beginning of the new millennium. On one hand, political opposition to liberalization of cargo air service rights appears to be less than for air passenger travel and significant progress has been achieved in customs reform. However the scope of policy reform for cargo services is much broader than for passenger services. Passenger travel is essentially an airport-to-airport service; air cargo is a sender-to-consignee service that requires extensive in-country presence and is highly influenced by policies that are traditionally considered domestic in nature. While much of the focus on air cargo liberalization is to move beyond bilateral air service agreements to regional or global open skies regimes, it is abundantly clear that open skies alone will not pave the way for more competitive air cargo services if customs procedures and FDI policies are also not reformed. This is especially true of the express air cargo service that demands end-to-end monitoring if not physical control of the shipment. These were issues that plagued integrators TNT and DHL in the Philippines, and contributed to their decision to abandon air cargo hubs in Manila. Similarly, an open skies declaration by India in the 1990s did little to upgrade the country's air cargo service because inadequate customs procedures, basic infrastructure, and competition policy.[27] One obstacle to air cargo liberalization may be the lack of a distinct category in the GATS framework for air cargo related FDI (freight forwarders, ground handling, infrastructure). Currently, these issues are addressed haphazardly under Postal and Courier Services and Maritime Transport commitments. As one air cargo firm has argued, it does not make sense to put air cargo services – now transporting nearly 40% of global trade – in the same category as bicycle courier services.[28]

What about cargo open skies? There are also some key interests that must be won over if air cargo services are to become part of a multilateral framework, such as GATS. The most important is the United States, which has successfully pursued an open skies agenda on a bilateral basis. Ceding this bilateral approach to a multilateral, most favored nation approach would require giving up an important negotiating advantage enjoyed by the U.S. versus other states, as highlighted in this research. The U.S. may also need to reconsider its position prohibiting cabotage. As discussed in Chapter Two, the huge U.S. domestic market comprises 30% of worldwide air cargo demand. It is hard to envision a genuine "level playing field" when U.S. firms enjoy protected status in such a large piece of the global market. For this to happen, another key interest group that must be brought aboard – American air cargo carriers, particularly FedEx and UPS. The argument advanced here is that the U.S. is unlikely to change its position on global open skies or cabotage unless these influential TNCs join the cause. Both are opposed to cabotage, and FedEx is opposed to a most favored nation approach to air cargo liberalization within the GATS framework.[29]

While the political influence of UPS and FedEx was documented in this research, DHL is likely to become a more influential political actor in the years ahead as part of the Deutsche

Post Group. The same can be argued for the TNT Post Group in the Netherlands. When the interests of the "big four" are aligned for a particular reform, the results can be impressive – as evidenced by their success in working with the World Customs Organization to define express customs procedures and standards. However, it is unclear that they are inclined to cooperation beyond the customs issue-area.

What are the implications of this research for air cargo business executives?

One implication of this research for business executives is that it highlights the importance of the government affairs functions in a global, but heavily regulated industry. A bewildering patchwork of national governments, supranational authorities, transnational interests, and international organizations influence air cargo commercial policy in ways that tangibly affect the operations and financial prospects of air cargo firms – particularly those with regional or global ambitions. Most firms lack the resources to participate in all these organizations, so must choose carefully. For example, should a firm seeking to influence customs policies in Southeast Asia direct its message toward state governments, APEC, ASEAN, the WCO, or the WTO? The importance of a TNC's government or regulatory affairs function extends beyond lobbying governments and international organizations for particular policy positions or reforms. For firms negotiating with foreign governments, it can be very important to understand the nature of domestic institutions that often constrain government negotiating partners. This is highlighted by the failed attempt by FedEx to make Taiwan its primary Asian air cargo hub in the mid-1990s. FedEx misread or failed to understand the nature of Taiwanese institutions and used a negotiating style that alienated many key government officials. UPS, on the other hand, recognized the cohesive nature of

Taiwan's domestic structures and adapted its negotiating approach to achieve to successfully conclude negotiations.

A second implication of this research for executives is that it highlights the necessity of freight forwarders and non-integrated air carriers to work more closely together on multiple fronts. With most projected growth in air cargo coming from the integrated service, there is a clear operational imperative to these two interests to develop standards as a means of reducing the average six-day delivery time of freight service. With the "Dell Model" proliferating to other industries, failure to address this gap by forwarders and air carriers will consign many of these firms to long-term revenue shrinkage.[30] It can be argued that there is a need for closer *regulatory* cooperation between these two interests. While the "big four" have the resources and clout to influence national governments and set standards in international organizations, freight forwarders and non-integrated air carriers are fragmented and uncoordinated in providing policy input. This highlights the need for better support of transnational industry associations to voice their concerns and interests. While the International Air Transport Association is a candidate for this role, its membership includes only to air carriers. The International Air Cargo Association emerged in the late 1990s as the leading industry voice, but its political influence (if not financial support) was limited.[31]

NOTES – CHAPTER 8, POSTSCRIPT, AND APPENDIX

[1] Woods, David, *"Air Cargo Services: a Candidate for Liberalisation in a New Trade Round,"* in WTO and Agenda (1999), p. 82.
[2] Interview.
3 U.S. General Accounting Office (1996), pp. 31-32. The U.S. Department of Transportation and State Department attributed increased attention to air cargo issues in part to 1) the emergence of FedEx and UPS as major competitors in the international market and 2) the growing importance of U.S. air trade with countries in Asia/Pacific and Latin America.
[4] Mode 3 addresses the supply of service by a service supplier of one member through the commercial presence in the territory of another member.
[5] For a discussion of the influence of Philippine Airlines on notions of sovereignty, see Bowen, John, *"The Asia Pacific Airline Industry: Prospects For Multilateral Liberalisation,"* in Findlay *et al* (1997), pp. 123 – 153, particularly pp. 132-133.
[6] *Wall Street Journal*, 25 September 2000.
[7] See Sochor (1991), pp. 201 – 225; Nayar (1995), p. 169; and Trethaway, Michael, *"Impediments to liberalisation in Asia Pacific international aviation,"* in Findlay et al (1997), pp. 65-73.
[8] For an account of air cargo TNC-government bargaining outside this body of research, see Lawton, Thomas C. and Michaels, Kevin P., *"The Evolving Global Production Structure: Implications for Political Economy,"* pp. 68 – 69, in Lawton *et a*l (2000). In early 1999, FedEx bargained directly with the U.K. government to win air service rights from Scotland to France.
[9] Milner (1997), pp. 168 – 178. The empirical focus was civil aviation agreements in the 1943 – 1947 timeframe.
[10] *Ibid.*, pp. 235 – 237, 242.
[11] Risse-Kappen (1995), p. 7.
[12] *Ibid.*, pp. 22 – 27. See pp. 112 – 146 by Cal Clark and Steve Chan for a discussion of Philippine domestic structures, which the authors label as "society dominated."
[13] Risse-Kappen also categorized the Philippines as a "society dominated" structure.
[14] Krasner, Stephen, *"Power Politics, institutions, and transnational relations,"* in Risse-Kappen (1995), pp. 258-260.
[15] Putnam (1988); Evans (1993); Moravcsik, Andrew, *"Integrating International and Domestic Theories of International Bargaining,"* in Evans (1993), pp. 1 – 42; Koehane and Milner (1996). Also see Milner (1997).
[16] See World Trade Organization (2000).
[17] Lowenfeld, Andreas, "A New Take-off for International Air Transport, *Foreign Affairs*, 54 (4), October 1975, p. 47.
[18] *Manila Bulletin*, 25 September 2000.
[19] The events in this paragraph are summarized from *The Washington Post*, January 20, 2001.
[20] *Philippine Daily Inquirer*, 6 June 2001.
[21] *UPS Press Release*, 10 April 2001.
[22] *Cargo News Asia*, 23 October 2000.
[23] *Ibid.*, 6 March 2000.
[24] From Chinaonline.com web site (http://www.chinaonline.com/topstories/001016/1/c000101655.asp) Accessed July 2001.
[25] Kasarda (1996) is an example.
[26] Economist Intelligence Unit (http://www.eiu.com). Accessed February 2001. The chief of the customs agency, Jose Guzman, ordered the firings in January 2001.
[27] *Cargo News Asia*, 26 November 2000.
[28] Interview.
[29] Woods, David, *"Air Cargo Services: A Candidate for Liberalization in a New Trade Round,"* in WTO and Agenda Publishing (1999), p. 82; Interviews. UPS was generally sympathetic to inclusion of air cargo in GATS in a most-favored nation framework, although this position may have weakened in 2000/2001. Another key U.S. domestic interest opposed to cabotage is labor unions. The department of Department of Defense is opposed to increasing foreign ownership of air carriers.

[30] A well-publicized initiative to develop standards in the late 1990s, known as Air 2000, was largely unsuccessful.

[31] The International Air Cargo Association includes airlines, forwarders, customs brokers, airports, and other firms in the cargo industry. In the 2000/2001 timeframe, the association stated its intent to more actively engage national governments and international organizations including the WCO, WTO, and International Chambers of Commerce. See *Cargo News Asia*, 26 January 2001.

Bibliography

General

Abueva, Jose; Ocampo, Romeo; Medalla, Felipe (1998), *The Philippines Into the 21st Century: Future Scenarios for Governance, Democracy and Development,* Quezon City: University of Philippines Press.

Baldwin, David., (1993), *Neorealism and Neoliberalism: The Contemporary Debate*, New York: Columbia University Press.

Bates, Robert and Krueger, Anne (1993), *Political and Economic Interactions in Economic Policy Reform,* Oxford: Blackwell.

Bhagwati, Jagdish (1988), *Protectionism*, Cambridge, Massachusetts: The MIT Press.

Bhagwati, Jagdish (1991), *Political Economy and International Economics* (edited by Douglas Irwin), Cambridge: The MIT Press.

Bhagwati, Jagdish (1997) *Writings on International Economics* (edited by V.N. Balasubramanyam), Oxford: Oxford University Press.

Button, Kenneth and Stough, Roger (1998), *The Benefits of Being A Hub Airport City* (unpublished study), George Mason University.

Cardosa, F.H., and Faletto, E. (1979), *Dependency and Development in Latin America*, Berkeley: University of California Press.

Chikiamco, Calixto V. (1992), *Reforming the System: Essays on Political Economy*, Manila: Orange Publications.

Clarke, Gerald (1998), *The Politics of NGOs in South-East Asia: Participation and protest in the Philippines,* London: Routledge.

Crisostomo, Isabelo T. (1997) *Fidel Valdez Ramos: Builder, Reformer, Peacemaker* , Quezon City: J. Kriz Publishing Enterprises.

Das, Dilip K.(1996), *Emerging Growth Pole: The Asia Pacific Economy*, New York: Prentice Hall.

Dejillas, Leopoldo (1996), *Economic Policy and the Market Economy: The Philippine Setting*, Makati City, Philippines): Insitute for Development Research and Studies.

Dicken, Peter., (1992), *Global Shift: The Internationalization of Economic Activity*, London: Paul Chapman Publishing Ltd.

Dunning, John H. (ed.) (1997), Governments, Globalization, and International Business, Oxford: Oxford University Press.

Eden, Lorraine and Potter, Evan. (ed.) (1993), *Multinationals In The Global Political Economy*, New York: St. Martins Press.

Evans, Peter; Jacobson, Harold; and Putnam, Robert (1993), *Double Edged Diplomacy*, Berkeley: University of California Press.

Ferdinand, P. (1996), "The Taiwanese Economy" in Ferdinand, P. (ed.) *Take-off for Taiwan*, London: Royal Institute of International Affairs.

Findlay, Christopher, Chia, Lin Sen, Singh, Karmjit (ed.) (1997), *Asia Pacific Air Transport*, Singapore: Institute of Southeast Asian Studies.

Frank, Andre Gunder (1966), *"The Development of Underdevelopment,"* Monthly Review, 9, pp. 17-30.

Galtung, Johan (1971), *"A Structural Theory of Imperialism,"* Journal of Peace Research, 2, pp. 81 – 94.

Gidwitz, Betsy (1980), *The Politics Of International Air Transport*, Lexington, Massachussetts: D.C. Heath.

Goyer, J. Envall, K., and Tan, S.H. (2000), Air Express *Industry Plays Increasingly Important Role in ASEAN Economic Growth*, Washington, D.C.: US-ASEAN Business Council.

Grieco, Joseph M. (1990), *Cooperation Among Nations: Europe, America, ,and Non Tariff Barriers to Trade*, Ithaca, New York: Cornell University Press.

Haas, Peter (1990), *Saving the Mediterranean*, New York: Columbia University Press.

Haas, Peter (ed.) (1992), "Knowledge, Pwer, and International Policy Coordination," *International Organization*, 46.

Henderson, David (1998), *The Changing Fortunes of Economic Liberalism: Yesterday, Today and Tomorrow*, London: Institute of Economic Affairs.

Hills, Jill (1994)., 'Dependency Theory and its relevance today: international institutions in telecommunications and structural power, *Review of International Studies*, 20, 169-186.

Hobsbawm, E.J. (1979), 'The development of the world economy,' *Cambridge Journal of Economics,* 3, pp. 305-318.

Hocking, Brian, and McGuire, Steven (ed.) (1999), *Trade Politics: International, domestic, and regional perspectives,"* London: Routledge.

Hubner, Wolfgang (1999*), "Regulatory Reform in International Air Cargo Transportation,"* OECD Working Paper, OECD Division of Transport: Geneva.

Huntingdon, Samuel P. (1966), *Political Order in Changing Societies*, New Haven: Yale University Press.

Ito, Takatoshi, and Krueger, Anne O. (2000), *Deregulation and Interdependence in the Asia-Pacific Region*, Chicago: University of Chicago Press.

Jackson, Robert H. (ed.) (1999), *Sovereignty at the Millennium*, Oxford: Backwell Publishers.

Jöhnsson, Christer (1987), *International Aviation and the Politics of Regime Change*, London: Frances Pinter.

Kasarda, John D.(1996), "Airport-Related Industrial Development," *Urban Land*, June 1996.

Keohane, Robert O., (1984), *After Hegemony: Cooperation and Discord in the World Political Economy,*, Princeton, N.J., Princeton University Press.

Keohane, Robert O., and Milner, Helen V. (1996), *Internationalization and Domestic Politics*, Cambridge: Cambridge University Press.

Keohane, Robert O., and Nye, Joseph S.,(1977), *Power and Interdependence,*, Boston: Little, Brown.

Kobrin, Stephen J., (1987), "Testing the bargaining hypothesis in the manufacturing sector in developing countries," *International Organization*, 41, 611 – 627.

Krasner, Stephen D. (ed.), (1983), *International Regimes*, Itathaca, N.Y.: Cornell University Press.

Krasner, Stephen D., (1985), *Structural Conflict: the Third World Against Global Liberalism*, Berkeley: University of California Press.

Krugman, Paul R., (1996), *Pop Internationalism*, Cambridge, MA: MIT Press

Kuo, Cheng-Tian (1990), *Global Competitiveness and industrial growth in Taiwan and The Philippines*, Pittsburgh: University of Pittsburgh Press.

Lau, L. (1994), "The Competitive Advantage of Tiawan," *Journal of Far Eastern Business*, Vol. 1, No.1, pp. 90 – 112.

Lawton, Thomas C. (1997), *Technology and the New Diplomacy: The Creation and control of EC Industrial Policy for Semiconductors*, Aldershot, U.K.: Ashgate.

Lawton, Thomas C., Rosenau, James N., and Verdun, Amy C. (2000), *Strange Power: Shaping the parameters of international relations and international political economy*, Aldershot, U.K.: Ashgate.

Maguire, Keith (1998), *The Rise of Modern Taiwan*, Aldershot, U.K.: Ashgate.

Masuyama, S.,Vandenbrink, D., Yue, C.S. (ed.) (1997) *Industrial Policies in East Asia*, Tokyo: Nomura Institute and Singapore: Institute of Southeast Asian Studies.

McBeath, Gerald (1998), *Wealth and Freedom: Taiwan's New Political Economy*, Aldershot: Ashgate Publishing.

Milner, Helen V.(1997), *Interests, Institutions, and Information*, Princeton: Princeton University Press.

Morgan, Roger; Lorentzen Jochen; Leander, Anna; Guzzini, Stefano (1993) (ed.), *New Dipomacy in the Post Cold War World: Essays for Susan Strange*. New York: St. Martins Press.

Nayar, Raj Nayar (1995), 'Regimes, power, and international aviation,' *International Organization*, 49, 1, pp.139-170.

North, Douglass (1990), *Institutions, Institutional Change, and Economic Performance*, Cambridge, New York: Cambridge University Press.

Pegg, Scott (1998), *International Society and the De Facto State*, Aldershot, U.K.:Ashgate Publishing.

Popper, Karl R.(1966), *The Open Society And Its Enemies (Book 2: Hegel and Marx)*, Princeton: Princeton University Press.

Porter, Michael (1985), *Competitive Advantage*, New York: Free Press.

Putnam, Robert (1988), "Diplomacy and Domestic Politics," *International Organization*, 42, pp. 427 – 460.

Reid, Robert H. and Guerrero, Eileen (1995), *Corazon Aquino and the Brushfire Revolution*, Baton Rouge: Lousiana State University Press.

Risse-Kappen, Thomas (1995), *Bringing Transnational Relations Back In: Non-state actors, domestics structures, and international institutions*. Cambridge: Cambridge University Press.

Robinson, Thomas W. (ed.) (1991), *Democracy & Development in East Asia*,Washington D.C.:AEI Press.

Sally, Razeen (1995), *States and Firms: Multinational Enterprises in institutional competition*, London: Routledge.

Sampson, Anthony (1984), *Empires Of The Sky: The Politics, Contests, and Cartels of World Airlines*, London: Hodder & Stoughton.

Singer, J. David (1960), "International Conflict: Three Levels of Analysis," *World Politics*, 12, pp. 453-461.

Smith, Adam (1964), *The Wealth Of Nations,* London: Dent & Sons.

Sochor, Eugene (1991), *The Politics of International Aviation*, London: MacMillan.

Stopford, John and Strange, Susan (with John S. Henley) (1991), *Rival States, Rival Firms: Competition for world market shares*. Cambridge: Cambridge University Press.

Taneja, Nawal K. (1979), *The U.S. Airfreight Industry*, Lexington, MA: Lexington Books.

Thatcher, Margaret (1993), *Margaret Thatcher: The Downing Street Years*, New York: HarperCollins Publishers.

Wade, Robert (1990), *Governing The Market: Theory and the Role of Government in East Asian Industrialization*. Princeton: Princeton University Press.

Waltz, Kenneth N. (1959), Man, the State, and War: A Theoretical Analysis, Neew York: Columbia University Press.

Weiss, Linda (1998), *The Myth of the Powerless State*. Cambridge: Polity Press.

Williamson, John (ed.) (1994), *The Political Economy of Policy Reform*, Washington, D.C.: Institute for International Economics.

Womack, James P. (1991), *The Machine That Changed The World: The Story of Lean Production,* New York: Harper Perenial.

Yeats, A. (1998), "Just How Big is Global Production Sharing?" World Bank, Policy Research Working Paper No. 1871, Washington D.C.

Young, Oran R. (1980), "International Regimes: Problems of Conception Formation," *World Politics,* April 1980, pp. 331-356.

Zacher, Mark W. (with Brent A. Sutton) (1996), *Governing Global Networks: International Regimes for Transportation and Communication*, Cambridge: Cambridge University Press.

Primary Source

Amdidji Group Ltd, *The DOTC Civil Aviation Master Plan for the Republic of the Philippines,* (Volume 1), Manila: 1997.

APEC Subcommittee on Customs Procedures (1997), *A Blueprint for APEC Customs Modernization,* Singapore: APEC Secretariat.

Boeing Commercial Airplanes Group (1994), *1994/1995 World Air Cargo Forecast*, Seattle, Washington: The Boeing Corporation.

Boeing Commercial Airplanes Group (1998), *1998/1999 World Air Cargo Forecast*, Seattle, Washington: The Boeing Corporation.

Boeing Commercial Airplanes Group (2000), *2000/2001 World Air Cargo Forecast*, Seattle, Washington: The Boeing Corporation.

Central Intelligence Agency (1999), *1999 World Fact Book*, Washington, D.C.

Council for Economic Planning and Development - Republic of China (1998), *Taiwan Opens Up – A Regional Business Center in the Making.* Taipei.

Council for Economic Planning and Development – Republic of China (1999a), *1999 Taiwan Statistical Data Book*, Taipei.

Council for Economic Planning and Development – Republic of China (1999b), *The APROC Plan – Achievements and Prospects (July 8,1999),* Taipei.

Dallas / FortWorth International Airport (1998), *1998 Business Activity Report.*

Department of Customs Administration – Chinese Taipei (1999), *Customs Reform in Chinese Taipei: A Presentation to APEC*, 16 March, 1999.

Department of Trade and Communications - Philippines (1999), *DOTC Project Update – April 1999*, Manila.

European Commission (1996), *Policy Options for Internalizing External Costs of Transport in the European Union*, Brussels.

FDX Corporation (1998), *FDX Annual Report*, Memphis.

FDX Corporation (1999), *FDX Corporate Fact Sheet*, Memphis.

National Statistics Office, Republic of the Philippines (1990 – 1999 annual editions), *Foreign Trade Statistics of the Philippines*, Manila: National Statistics Office.

Philippine Aviation Convention Committee (1994), *Convention Report: Philippine Aviation Convention 1994*, Manila.

Productivity Commission (1998), *International Air Services*, Report No. 2, AusInfo: Canberra.

Republic of China Ministry of Finance (1999), *Customs Administration of Republic of China*, Taipei: ROC Ministry of Finance.

Subic Bay Development and Management Centre (1999), *Position Paper In Support of the Continuation/Resumption of the Air Agreements between R.P and R.O.C.,* submitted to the Philippine House of Representatives, 16 November 1999.

The International Air Cargo Association (1998), *The International Air Cargo Association Manifesto*, Miami, Florida.

McFarland, Henry B. (1998), *The Economic Importance of the All-Cargo Air Carriers*, study prepared for the Cargo Airline Association (Washington, D.C.) by Economists Incorporated.

U.S. Congress (1997), House of Representatives. *"International Aviation Bilaterals and Code Sharing Relationships: Hearing Before the Aviation Subcommittee,"* June 11-12.

U.S. General Accounting Office (1996), *International Aviation: DOT's Efforts To Promote U.S. Air Cargo Carriers' Interests.* (report to U.S. Congress). Springfield, VA: U.S. Commerce Department - National Technical Information Service.

World Trade Organization (1998a), Postal and Courier Services: Background Note by the Secretariat, Document # 98-2436, 12 June 1998, Geneva: WTO.

World Trade Organization (1998b), Maritime Transport Services: Background Note by the Secretariat, Document # 98-4578, 16 November1998, Geneva: WTO.

World Trade Organization and Agenda Publishing (1999), *The World Trade Brief*, London: Agenda Publishing.

World Trade Organization (2000) *2000 Annual Report: International Trade Statistics*, Geneva: WTO.

Further Material Used

A. Newspapers
Financial Times
The Wall Street Journal
The Journal of Commerce
The Manila Bulletin
The New York Times
The Philippine Daily Inquirer
The Washington Post
The China Post
The Straits Times

B. Weeklies/Monthlies
Aviation Week & Space Technology
Air Cargo World
Air Cargo News
Air Transport World
Asia Week
Cargo News Asia
Flight International
The Economist
Global Finance
Philippine Business Report
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RESEARCH INTERVIEWS

Organization	Category	Interviewee	Title	Number Of Interviews
Air Cargo Forwarders of Philippines	Philippine Air Cargo firm	Monico David	President	1
Air Express Intl. (AEI)	U.S. Air Cargo TNC	Milton Kohler	District Sales Manager	1
Air Foyle & British Cargo Airline Alliance	U.K. Air Cargo TNC	Chris Foyle	President, Chairman (BAA)	1
American Airlines	U.S. Air Cargo TNC	Chris Powers	MD-Latin America	1
American Airlines	U.S. Air Cargo TNC	Richard Brannon	MD-Cargo Alliances/Industry Affairs	1
American Chamber of Commerce, Philippines	Industry Association	Robert Blume	Investment Promotion Manager-BOI desk	1
American Chamber of Commerce, Philippines	Industry Association	Robert Faraone	Head -- Transportation Committee	2
American Chamber of Commerce, Taiwan	Industry Association	Natalie De Spiegeleire	Director of Government Analysis	1
American Chamber of Commerce, Taiwan	Industry Association	Richard Vuylsteke	President	1
American Institute of Taiwan	U.S. Government	Mary Tarnowka	Economic Officer	1
APCO	Public Relations Consultancy	Rachel Thompson	Air Cargo Expert	1
APROC Coordination Office (CEPD)	Taiwan Government.	James C. Ho, PhD.	Executive Director	2
ASPAC International Airfreight, Inc.	Philippine Air Cargo firm	Flexiberto G. Pascua	Assistant Manager - Export Operations	1
ASPAC International Airfreight, Inc.	Philippine Air Cargo firm	Teogenes B. Cubil	Director-Exports	2
Boeing Corporation	U.S. Aircraft TNC	David Pearce	Head of Cargo Market Market Analysis	1
Boeing Corporation	U.S. Aircraft TNC	Thomas Crabtree	Regional Director, Airline Market Analysis - Cargo	1
Bureau of Customs	Philippine Government	John Simon	Chief, International Affairs, Philippines Customs Service	1
Cargo Airline Association	Industry Association	Stevel Alderman	Head	1
Cargo Airline Association	Industry Association	Yvette Rose	VP-Regulatory Issues	2
Cargo News Asia	Air Cargo Publication	Alec Almazon	Former Reporter, Cargo News Asia	2
Cargo News Asia	Air Cargo Publication	Brent Hannon	Former Reporter, Cargo News Asia	1
Cargo News Asia	Air Cargo Publication	Russell Green	Publisher	2
China Airlines Cargo	Taiwan Air Cargo firm	Annie Yen-Chin CHU	Supervisor, Marketing and Planning	1
China Airlines Cargo	Taiwan Air Cargo firm	Eddie Chou	Manager- Marketing & Sales	1
China Airlines Cargo	Taiwan Air Cargo firm	K.C. Kuey	External Relations Manager	2
China Airlines Cargo	Taiwan Air Cargo firm	Peter Yap	Regional Director for Taiwan; Former Head of Cargo	1
China Airlines Cargo	Taiwan Air Cargo firm	Victor Su	Assistant Marketing Manager	1
City of Olongapo	Philippine Government.	Ferdinand Aristorenas	Olongapoo City Administrator	1
City of Olongapo	Philippine Government.	Lou Pawid	Former SBMA Administrator, Office of Olongapo City Admin.	1
Civil Aeronautics Administriation	Taiwan Government.	Cheng, Chia-Li (Betty)	Branch Chief - International Affairs; Planning,Legal& Int. Af. Division	4
Civil Aeronautics Administriation	Taiwan Government.	Fu, Yu-May	Operations Branch, Air Transport Division	2
Civil Aeronautics Administriation	Taiwan Government.	Lu, Ching-Chyuan (Kevin)	Operations Branch, Air Transport Division	1
Civil Aeronautics Administriation	Taiwan Government.	Shinn-Der Linn (Charles)	Director, Air Transport Division	3
Civil Aeronautics Board	Philippine Government	Victor Limlingan	Former CAB Member, Professor Asian Institute of Management	3
Civil Aeronautics Board	Philippine Government	Attorney Guia Martinez	Director, Civil Aeronautics Board	2
Civil Aeronautics Board, Dept.of Foreign Affairs	Philippine Government.	Franklin Ebdalin	As. Secretary - Dept. of Foreign Affairs, CAB member	1
Civil Aviation Authority of Singapore	Singapore Government	Angela Lam	CAAS-Air Service Agreements	1
Council of Economic Planning and Development	Taiwan Government.	Chi Schive	Vice Chairman, Taiwan Council for Economic Planning	1
Crowell & Moring LLP	Intl. Aviation Lawyer	Bruce Keiner, Jr.	Partner	1
Customs Administration	Taiwan Government.	Mary S.S. Hsu	As. Director General, Dept of Customs Administration	3
Customs Administration	Taiwan Government.	Richard R.C. Liu	Director General, Dept. of Customs Administration	1
Customs Administration	Taiwan Government.	Wen-Chieh Lee	Section Chief, Dept. of Customs Administration	1
Dept of Trade & Industry	Philippine Government	Egdel T. Custodio	Asisstant Secretary	1
Dept of Transportation & Communication	Philippine Government	Filipinas Cabana	Supervising Transport Development Officer	1
Dept of Transportation & Communication	Philippine Government	George D. Esguerra	Assistant Secretary DOTC	2
Dept of Transportation & Communication	Philippine Government	Porvenir Porchiuncula	Chief of Economic Planning & Research, CAB	3
Dept of Transportation and Regional Services	Australian Government	Chris Stamford	Director-North Asia and Policy Section; APEC Rep.	1
Dept of Transportation and Regional Services	Australian Government	Ross Gough	Director-ASEAN and Europe Section	1
Dept. of Transport	New Zealand Government	John Macilree	Prinicipal Advisor - Air Services Team	1
Dept. Of Transportation	U.S. Government.	Dave Modesitt	Attorney, Philippines focus	1
Dept. Of Transportation	U.S. Government.	Douglas Leister	Exec. Asst - Asec for Policy and International Affairs	2
Dept. Of Transportation	U.S. Government.	Edward Wilbur	North Pacific Desk	1
Dept. Of Transportation	U.S. Government.	Mary Street	Attorney, U.K. focus	1
Dept. Of Transportation	U.S. Government.	Todd M. Homan	Industry Economist, Office of Aviation Analysis	1
DFW International Airport	Airport Authority	Emir Pineda	Manager Cargo Trade & Development	1
DHL Worldwide Express	Belgian Air Cargo TNC	Betty Wong	Public Relations - DHL Asia	1
DHL Worldwide Express	Belgian Air Cargo TNC	Kenneth Lu	Manager - Marketing & Planning Department	2
DHL Worldwide Express	Belgian Air Cargo TNC	Nick Chen	Services Development Manager	1
DHL Worldwide Express	Belgian Air Cargo TNC	Ruby Macadangdang	Operations	1
EVA Airways Corporation	Taiwan Air Cargo firm	Bruno Chang	Deputy Senior VP, Cargo Division	2
FedEx	U.S. Air Cargo TNC	Alex Bandeis	Manila Operations	1
FedEx	U.S. Air Cargo TNC	Alex Yim	GM-Subic Bay	1
Fedex	U.S. Air Cargo TNC	Andrew DaRoza	Vice President-Legal, Asia Pacific	1
Fedex	U.S. Air Cargo TNC	Dave Glauber	Vice President - Regulatory Affairs	2
Fedex	U.S. Air Cargo TNC	Dennice Wilson	US-ASEAN	1
FedEx	U.S. Air Cargo TNC	Mike Murkowski	Former Vice President Marketing - Asia Pacific Region	1
Fedex	U.S. Air Cargo TNC	Warren Goff	Senior Attorney - International Regulatory Affairs	2
Flughafen Koln/Bonn	Airport Authority	Ute Weber	Cargo Marketing	1
Free Trade Area of the Americas	International Organization	Michael P. Eastman	Executive Director	1

RESEARCH INTERVIEWS (Continued)

Organization	Category	Interviewee	Title	Interviews
Freedom To Fly Coaltion	Phillipine NGO	Narzalina Lim	President	2
IATA	International Organization	David O'Connor	Director, External Relations US	1
Keidanren	Industry Association	Shigeki Komatsubara	Chief Economist	1
Kenan Institute of Private Enterprise	Logistics Consultant/Expert	John Kasarda, Ph.D.	Distinguished Professor and Director	1
MergeGlobal	Logistics Consultant/Expert	Brian Clancy	Principal	1
MergeGlobal	Logistics Consultant/Expert	David Hoppin	Principal	2
MergeGlobal	Logistics Consultant/Expert	Joseph Guerissi	Economist, Consultant	2
Northwest Airlines	U.S. Air Cargo TNC	Dave Mishkin	VP International & Regulatory Affairs	1
Northwest Airlines	U.S. Air Cargo TNC	Jim Friedel	Vice President Cargo Marketing & Sales	2
Northwest Airlines	U.S. Air Cargo TNC	Megan Poldy	Managing Director - Government Affairs & As.General Council	1
Pacific East Asia Cargo	Philippine Air Cargo firm	Ben Solij	Former CEO	2
Perkins Cole (Taipei)	Intl. Aviation Lawyer	Jessika L.J. Ko	Attorney	1
Philippine Airlines	Phillippine Air Cargo firm	Arnul Pan	As VP-Cargo Sales & Marketing	1
Philippine Airlines	Philippine Air Cargo firm	Jose Perez de Tagle	Director - External Affairs Dept	2
Philippine Board of Investments	Philippine Government	Celestino S. Santiago, Jr.	Infrastructure &Serv Oriented Industries Dept	1
Philippine Bureau of Customs	Philippine Government	Guillermo Parayno	Former Chairman (1992-1998)	1
Philippine Mission to Geneva (U.N., WTO)	Philippine Government	Johan Berabe	Diplomat	1
Saikal Brothers	Taiwan Air Cargo firm	Karl K.L. Yen	Director, Government Relations	1
Subic Bay Metropolitan Authority	Philippine Government.	Anthony Deleon	Public Affairs Laison	2
Subic Bay Metropolitan Authority	Philippine Government.	Michael Tuquib	Former Volunteer, SBMA	2
Subic Bay Metropolitan Authority	Philippine Government.	Nena Castro	Terminal Operations Manager	1
Subic Bay Metropolitan Authority	Phillippine Government.	Richard Gordon	Former President	1
Subic Bay Metropolitan Authority	Philippine Government.	Victor Mamon	Deputy Administrator - Ports	1
Taipei Air Cargo Terminal	Taiwan Government.	Kung Hsian Shan	Manager - Taipei Air Cargo Terminal	1
The International Air Cargo Association	Industry Association	Walter Johson	Former President	2
The International Air Cargo Association	International Organization	Geoffrey Bridges	President	1
TNT International Express	Dutch Air Cargo TNC	May Antonia Sinnung	Business Manager - TNT Philippines	2
U.S.-ASEAN Business Council	International Organization	Jim Goyer	Director	1
UAL	U.S. Air Cargo TNC	Hartigan, Jim	VP, Cargo Operations	1
UAL	U.S. Air Cargo TNC	Nicolas Ferri	GM-Taiwan, Former Head Transportation Committee AmCham	1
UAL	U.S. Air Cargo TNC	Peter Kreiser	Director, Cargo Operations	1
UAL	U.S. Air Cargo TNC	Yvonne Ramos	Director, International Affairs	1
University of Michigan	Asia Consultant/Academic	C.K. Prahalad	Professor, School of Business Administration	1
UPS	U.S. Air Cargo TNC	Anton Van der Lande	Vice President - Public Affairs International	1
UPS	U.S. Air Cargo TNC	Daniel Chen	Managing Director Taiwan	3
UPS	U.S. Air Cargo TNC	James Goh	Asia Pacific government affairs & Customs brokerage director	4
UPS	U.S. Air Cargo TNC	Steve Okun	Manager, Public Affairs Corporate	2
UPS	U.S. Air Cargo TNC	Monaghan, Steve	VP Public Affairs - Asia	1
UPS	U.S. Air Cargo TNC	Tan Sock Hwee	Public Affairs-Asia	1
UPS-Delbros International Express Ltd	Philippine Air Cargo firm	Tim Gohoc	Operations Manager	2
World Customs Organization	International Organization	Douglas Tweddle	Director, Compliance and Facilitation	1
World Trade Organization	International Organization	Peter Milthorpe	Counselor-Accession	1

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